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THE PRACTICAL WORK OF A BANK

A TREATISE ON PRACTICAL BANKING WHICH AIMS TO
SHOW THE FUNDAMENTAL PRINCIPLES OF MONEY;
THE PRACTICAL WORK OF A BANK IN DETAIL, AND
PARTICULARLY, CREDIT IN ITS RELATION
TO BANKING OPERATIONS

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TO MY FRIEND
VICTOR A. LERSNER
IN APPRECIATION OF A LONG AND
HELPFUL FRIENDSHIP

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PREFACE

The methods and machinery of practical banking do not materially change with the passing of the years; such changes as have taken place being mechanical rather than fundamental. The one drastic innovation of the past decade has been the introduction of the Numerical Transit System, which substitutes numbers for names—an obvious conservator of time.

While the technique of banking has not undergone any decided departure from established principles, the machinery of banking has, however, gone through a process of evolution, as the increasing demands of the business world have made shorter and quicker methods necessary in order to cope with the added volume of work without unduly increasing the cost. The adding machine and the adding typewriter, particularly, have come into play as time and labor savers of the highest usefulness, without which the labor cost of banking would be much greater than the profits would warrant.

Moreover, there would seem to be room for a new work on practical banking, dealing with the subject in a form different from any which have heretofore appeared; and this work is in no way intended to supplant, but rather to supplement, those which have gone before, whose excellence will for many years be recognized.

It has been the author's aim to gather the best thought of the past ten years relative to the practical conduct of a bank, particularly from men who have written and spoken concerning the work in which they have had long experience. Especially is this true of the men of the American Institute of Banking, from whom much help has been received, and which is here gratefully acknowledged.

It is difficult, if not impossible, in a work of this kind, to avoid apparent repetition, as the work is viewed from different angles; for the work so dovetails that in describing one process, or the work of one department, other processes and departments must of necessity be mentioned, but such duplication has been avoided as much as possible.

Owing to the formative state of the Federal Reserve System it has been thought best to omit detailed account of its operations, covering the same only in general principles with an appendix giving recent rulings affecting commercial paper and time deposits.

It is hoped the work will prove constructive in its development, concise and correct in its statements, and readable withal. Each chapter has been passed upon by those in position to criticise intelligently, and many helpful suggestions have been received from various sources, due acknowledgment of which appears on a succeeding page.

W. H. K., JR.

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CHAPTER I.

THE THING WE CALL MONEY

At the very beginning of the economic process each man got from nature the things he needed to satisfy his wants, which were simple. But men soon found that to work together was more satisfactory than to work alone, and that they could profit by exchanging the things they produced for things produced by others. A man might have a surplus of one thing and his neighbor a dearth of another, and they could exchange to their mutual advantage. Individualistic life as led by Robinson Crusoe is possible only in story books. And as men produced and exchanged they learned to trust each other—not in the sense of extending credit, but as to fair dealing. The exchange of commodities for commodities is the basis of all the world's industry. Trade is merely the exchange of one article for another. Trade is barter and barter is trade.¹

DEBTS SETTLED BY EXCHANGING COMMODITIES

Communities differ and nature's products are not evenly distributed. One community can best produce one thing; another, another. One community can produce wheat and the other grind it into flour. Where wheat is in abundance, water power may be scarce. And as one section produces one thing and another produces another, community debts are settled by an exchange of goods for goods, the same as between individuals. Thus, New England buys wheat from Dakota and gives shoes. For our cotton England gives us manufactured goods. For the debts we owe her for shipping, freights, insurance and interest on our debt to her, we send, not gold, but wheat and cotton. We pay, as a rule, not in money, but in goods. The trouble in the early days of the present war was we could not get our goods over to

¹It must be borne in mind, however, that all trade is barter, even when the precious metals are employed as intermediaries—the latter being articles of barter also, and possessing the same value as the things for which they are exchanged. The whole science of money hinges on this fact. White, Money and Banking, p. 10.

settle our European debts, and it looked as if we would be obliged to pay in gold.

DEMAND AND SUPPLY

The amount of product one man will give for a certain amount of another depends upon the amount he has at hand, the labor involved in producing,² and other factors entering into the scheme of production. That which is scarce will have a higher exchange value than that which is plentiful. This condition tends to correct itself by labor going into those channels where scarcity exists, and producing enough to effect an equilibrium. Thus, if cattle are scarce and meat high, unless by some operation such as a meat trust, whereby prices can be maintained by artificial means (although not for long) men will engage in raising meat animals until the supply balances the demand and prices fall. Only as the consumptive power of the people increases faster than the productive power can high prices in food products long exist.

As civilization has developed, men's wants have become more complex, so that as wants have increased, ways and means have been found to satisfy them; and little by little through the centuries we have built up the present world structure of commerce and industry, the ultimate end and aim of which is to satisfy the three fundamental wants of the human race—food, clothing and shelter—with all the ramifications that result from the satisfaction and gratification of the five senses.

And as time went on, increased facilities for the production of goods have been devised, labor has been divided and sub-divided, each doing best that for which he is most fit by training, education and temperament, so that out of it all has arisen what we call "exchange," meaning the giving of one thing for another, whether it be money or goods or services, or a combination of these elements.

EARLY RECOLLECTIONS

Very early in life we came to realize that there was a difference between the things which belonged to us and the things

²Money is always the product of labor. Nobody could give that which has cost him labor in exchange for something which he could obtain without labor. White, p. 9.

which belonged to others. We were jealous of our toys. We were impressed with the idea that over the things which were ours we were allowed to exercise dominion; we had special rights. We were early taught to respect the rights of others. We learned that the things that were displayed in the candy store were not ours and could not be had for asking, but could only be obtained by giving something in exchange. Just what the penny we had to spend was in the economic scheme—what the storekeeper did with it—we did not know or care. And whether we were receiving value in return, we did not have much thought; but we did have concern that we should exchange the penny for something that appealed to us.

The first thing we learned, therefore, before acquiring possession of the property of others was that permission of the owner must be obtained, or something given in exchange. If the permission was without an exchange it became a gift and not an exchange. We might, however, get possession by promising to give something, sometime, and thereby obtain the article on a deferred payment, and thus obtain it on credit. We have, therefore, unconsciously as children used the two fundamentals of banking—money and credit.

A COMMON DENOMINATOR OF VALUES

Before any exchange of goods can be made, not only must consent be given by both parties, but there must be an agreement as to what shall constitute the basis of the trade—what shall measure the value. The consent must be to the same thing. It matters not, so far as the fairness goes, if each were to agree that thirty inches were a yard, neither would be the loser, for in fixing the value this would be considered.

As labor became divided—each man to his trade and all trading together, exchanging goods for goods—it was found that a common denominator of values was necessary. It was needful that the man who made a pair of shoes should have something by which to measure the labor and material involved therein, so that he might exchange his labor as rep-

resented thereby for other things. The shoes must represent so many units³

We did not progress very far in life before we discovered that there was a common thing that would be accepted by all men as the basis of all exchanges and for all things, namely, money. It might be in the form of paper, or it might be metallic money, but it was money. And we further learned that if we did not want to exchange the money we had at the time for some other article, we could keep it and use it at a future time, and it would be as good then as at first; and thus money came to have power in reserve—stored energy—as well as exchange power. We could save it as well as trade with it. Moreover, we could put it in a bank and get a pass-book or a certificate of deposit for it, and when we wanted it the banker would give us, not the identical money we left with him, but its equivalent, and thus we discovered that money would not only exchange for goods and keep its power to exchange for goods, but could be exchanged for a credit. And it may be we found that if we left it for a length of time, the banker would give us a little more than we deposited, and money came to have an earning power; that is, the banker paid us for the privilege of using our money for a time to loan to other men who wanted to use it and would pay for its use, and thus we became acquainted with the principle, if not the theory, of interest and the uses of money.

A MEDIUM OF EXCHANGE

It was not long after men began trading that they real-

³It is plain that in the first society (that is, in the household) there was no such thing as barter, but that it took place when the community became enlarged; for the former had all things in common, while the latter, being separated, must exchange with each other according to their needs, just as many barbarous tribes now subsist by barter; for these merely exchange one useful thing for another. This kind of trading is not contrary to nature, nor does it resemble gainful occupation, being merely the complement of one's natural independence. From this, nevertheless, it came about logically, that as the machinery for bringing in what was wanted, and sending out the surplus, was inconvenient, the use of money was devised as a matter of necessity, for not all necessities of life are easy of carriage. Therefore, to effect their exchanges men contrived something to give and take among themselves, which, being valuable in itself, had an advantage of being easily passed from hand to hand for the needs of life—such as iron or silver or something else of that kind, of which they first determined merely the size and weight, but eventually put a stamp on it in order to save the trouble of weighing, for the stamp was placed there as a sign of its value. Aristotle, *Politics*, p. 9.

ized that barter would not answer. They needed a common medium of exchange⁴ and a common denominator of prices. And by common consent this medium of exchange is called money. "When I save enough money, I am going into business," says the clerk; meaning that when he gets enough of one thing to exchange for other things, he will give the other things in exchange for the thing he first had and, therefore, do business as a trader, using money as a medium of exchange and a basis for the exchange values. He buys new goods only when he has the money in hand or in prospect to exchange for them. The contractor on the sewer system will exchange his money, saved it may be by working on a sewer job himself, for the labor of the men in the trench, who will exchange that money for things to eat; and the merchant will exchange the money for more goods to exchange again for money.

The merchant looks in his till and finds it empty. "I must collect some money," says he; meaning that he must turn his book accounts into money to exchange for goods.

Whether it is a Wall Street broker buying stocks and bonds by the million, or the driver of a truck, or the sales-girl in a department store, or the grocer or the butcher, or the man who digs in the trench, the common end of all is to get the thing we call money, in order that they may exchange it for the things they want, knowing that as soon as they get money they can satisfy their wants, however simple or complex.

WHAT IS MONEY?

Money is a commodity which mankind voluntarily accepts in exchange for all other commodities and services⁵ Any commodity to answer as money must have certain qual-

⁴Men discover the need of a common medium of exchange as soon as society emerges from the patriarchial state, where each group of persons is sufficient unto itself. They learn by experience that one who wants wheat and has only skins to exchange for it, must meet someone who has wheat and wants skins, and that much time and labor may be lost before the two can find each other. Then more time may be lost before they can agree upon the ratio of exchange at which the two articles should be exchanged for each other. The few and simple words with which Aristotle has treated this subject cannot be bettered. Whole tomes have been written to say the same things and have ended without saying them. White, p. 9.

⁵White, p. 9.

ities. It must exist in such quantities as to permit of its being obtained without great hardship, although not without some labor and hardship, so that its rarity will make it of value; for if it be free for the taking no one will give in exchange for it anything of value. A people cannot use as money the thing they do not possess either substantively or potentially. It must be possible of obtainment. Whatever value to the individual it may have, it must have a value to the community as a whole, or it will not answer as money. The things that have, the world over, been used as money—hides, shells, tobacco, etc.—have all had a community value; and gold and silver have for centuries had this quality for reasons hereafter mentioned.

A commodity to answer as money should be ductile; that is, it must be capable of being smelted, purified and “coined” by being turned into discs, stamped with the insignia of value, and, therefore, readily distinguishable as money and the value certain. It must permit of being divided into parts, each of which is equal to every other part, and the sum of the parts equal to the whole.

There may be fifty fleeces of sheep, all subject to cleansing and, therefore, pure from dross, but no two would be alike in weight or fineness, and certainly not suitable as money. A skin might have answered as money for primitive man, but would be totally inadequate for present-day needs. And to attempt to exchange an article of smaller value for a skin would be impossible, for to cut the skin might ruin it, and the sum of the parts would not be equal to the whole. It becomes necessary, therefore, to find something that can be divided into minute parts, coined, and of sufficient hardness to take a stamp and hold it, and to represent in small compass much value—that is, exchangeability. It must be easily carried about, and, therefore, small in its dimensions.

The things that have been used as money include skins, dried meat, fish, tobacco, shells, cattle, silk, cocoanut oil, wheat, rice, corn, iron, copper, nickel, silver and gold. Whatever will be generally acceptable to the people will answer in a limited sense for money, but not in its widest sense, nor over a wide territory. Moreover, all these articles have no lasting character. They will not stand the elements, nor are they divisible as is metal.

The story is told of a Connecticut collector of taxes whc

received his taxes in peas—a current article used as money; but in rowing his load of “money” down the Connecticut River, a rain came up and his “tax money” all spoiled.

While all the articles mentioned as having been used as money answered for a time and to a limited degree, they had many disadvantages that were apparent even to primitive peoples, and so by a process of evolution, gold and silver have come to be used the world over as the money of the nations,⁶ substitutes in the form of paper, and credit instruments in the form of bank notes, taking their places only that the supply might be safeguarded, the risk of loss reduced, and the abrasion and the annoyance of transferring the heavy article avoided.

The physical difficulties in using metallic money will be seen any day around Wall Street and the Sub-Treasury, where the shipping of gold is as interesting a process as the unloading of a ton of coal. Recently in the call for the first payment on the part of member banks to the funds of the Federal Reserve Banks, it was suggested that gold certificates be sent and not the metal, in order to obviate the physical labor of counting the coin. All metals have been used at one time or another, but gold and silver are now the only basic metals, copper and nickel being used only in subsidiary coin.

The desire on the part of men to adorn themselves has had much to do with the use of silver and gold as money, and these metals have a commodity value by reason of their uses in the arts, and this feature has added much to their worth. Whatever man uses for adornment he can use for money, if it be generally desirable, but the trouble with such a thing as a watch, even though gold, is readily apparent.

The funds which pass current in a community and answer as the common denominator of values as men trade with men are two: (a) Money funds, being accumulations of gold, silver, bank notes, gold and silver certificates, and other forms of paper money, these passing from hand to hand at their face value and freely accepted by all; and (b)

⁶All writers are agreed that the five requisites to a good kind of money are: Portability, uniformity, durability, cognizability, and stability of value. Long experience has taught mankind that these qualities are best embodied in the metal, gold. White, p. 12.

credit funds, such as checks, bank certificates of deposit, bills of exchange and promissory notes.

The bank is the accumulator of the money funds of the community and the clearing house for the credit funds. The credit funds in their net balances are settled by money funds and one is as important as the other.

PAPER MONEY

Money in itself has a value. It is useful in the arts. It is scarce. It involves labor, risk. Although the one thing to be desired of all material things, it is cumbersome and unsatisfactory as a medium of exchange.

We are now speaking of real money, not of promises to pay money. All of our circulating medium and all of our smaller coins are, either directly or indirectly, promises to pay money. In the case of the former the promise is stamped upon them. In the case of the latter it is merely expressed in the laws. The difference between real money and a promise to pay money is the same as that between a meal and a meal ticket—or between a trunk and a trunk check.⁷

But money may have a good substitute. As long as people know they can get the metallic money, they will be satisfied with a representative. They must, however, have confidence that back of the representative money there is real money that may be had upon demand; and the faith that this is so is the basis of all monetary systems. It is not needful that for every dollar of paper money there shall be a gold dollar, for the holders of paper dollars will not all want gold dollars at the same time. Therefore, on the same principle that all the depositors in a bank will not want their money at the same time, paper money may be issued on the theory that all holders of these promises to pay will not present them at the same time. Thus our Government agrees to pay to any holder of a greenback the equivalent in gold; but against \$346,000,000 of greenbacks it holds but \$150,000,000 of gold. And this has, as a rule, proven sufficient.

Such paper money—currency—is generally issued by a large bank that is empowered to do so by law, or individual

⁷White, p. 1.

banks under governmental supervision. In England the Bank of England issues practically all notes, these being essentially gold certificates, it being the policy of the Bank to have a pound sterling in gold for each pound note issued, there being also a small amount of paper money based on Government securities. In France, the Bank of France issues the notes, and in Germany, the Reichsbank. In this country the note-issue privilege is restricted to the national banks and to the Federal Reserve Banks. In order that these notes may pass current, be above suspicion, and freely accepted by the people, the underlying requirement is that there shall be no doubt about the ability of the issuing institution to pay real money (gold) upon demand.

THE EVOLUTION OF A BANK

The evolutionary process already referred to may be seen the more easily by using a simple illustration, which begins with barter and exchange and ends in a bank.

Let us suppose that a blacksmith holds out to the people of his community the offer that he will shoe horses and take in exchange for each shoe a dozen eggs. He has shoes to sell (barter) for eggs. The farmers have eggs to sell (exchange) for horseshoes. Therefore, he works on that proposition. But in the course of time he has a large supply of eggs and cannot use them all. He makes it known that he will exchange eggs for meat, potatoes, coffee, etc., and thus supplies the wants of his family by trading the eggs which he gets for shoeing horses, for other things. By and by he has a large and varied assortment of things for which he has traded and cannot use. He is "stocked up." He then ponders the question and decides upon a new move. He concludes that trading is not satisfactory, because there is no unit of value. He cannot exchange a beef for eggs, for it would require too many to make the trade fair. He finds eggs breakable and hard to keep. Therefore, he hits upon a new device. He takes a lot of horseshoe nails and stamps his initials upon them, and in return for various commodities gives his tokens of value—so many nails for an egg, a peck of potatoes, etc. These he agrees to take back from anyone in exchange for goods or services. He will give three eggs for three nails. Or, if he takes eggs for

flour, shoes, etc., and there is a balance that the other party does not wish to trade out, he simply hands him the horse-shoe nails, good for commodities when presented by anyone. We thus have token money. The blacksmith's nails would be good only where he is known and trusted. They could not circulate far from home. They are local money only.

Let us suppose that he adopts a higher standard of value—copper discs instead of iron nails; then silver discs, more carefully made; then gold coins with his monogram. Each of better metal, more lasting and more scarce. In the course of time these, too, become inconvenient to carry, and he issues instead paper certificates, agreeing to give metallic discs in return for the paper, which answers the purposes fully so long as no doubt exists as to the blacksmith-banker being able to make good his promises.

To carry on the simile, suppose further that a farmer wants to buy something the blacksmith has not on hand. He, therefore, gives him a written promise that he will return ten nails at the end of the month if the blacksmith will loan him eight nails for that time. The blacksmith has made a loan. Another farmer brings in a load of produce. He does not want nails, he may lose them; they are heavy. He prefers to trust the blacksmith with his produce and asks simply that he get a receipt. The blacksmith, therefore, opens a book account with the farmer, gives him a receipt, and credits him with the amount agreed upon, subject to the latter's order. He can come in person and demand the return of the amount due him, or he can transfer his right to another. From time to time he gives orders to his neighbors to go to the blacksmith and get nails on his account. He has thus opened a deposit and checking account.

Suppose two farmers have traded together and settled the debt, one by giving the other his promise to pay at a certain time, in nails of the horseshoer. The seller wants the tokens to use for other purposes. He, therefore, takes his neighbor's promise to pay, to the blacksmith and the latter buys (discounts) it, charging him for the accommodation. He has thus made a discount. And so we have a "bank," loaning, discounting and receiving deposits. And many a prosperous bank to-day is the outgrowth of just such a simple process, varied, of course, as conditions vary, but funda-

mentally the same. Traders become merchants; merchants, bankers; and bankers, banks.

If we apply the same reasoning to a higher realm of activity and instead of the blacksmith we have a number of men—a corporation—authorized by law to issue paper money, to loan money, open checking accounts, etc., who as evidence of good faith have invested their own money in the enterprise, we have a bank. If instead of the horseshoe nails, we have finely coined gold and silver, carefully made to indicate the exact weight and quality, we have government metallic money. If, instead of the blacksmith's promise to take in exchange, we have the general promise or willingness of all the people to accept because of faith in the issuing power, we have the thing we call money and a money system.

With this brief introduction into the nature and uses of money we are prepared to see how it is used in banking; leaving it to the chapter on credit to treat of the nature and uses of credit as it applies to banking transactions.

CHAPTER II.

THE BANK AS A CREDIT MACHINE

Metallic money proving expensive and inconvenient, the paper substitute was devised, and credit operations evolved, so that money in the metal is now mainly used only in the final settlements and as the basis of the credit system. The inconvenience of making payment every time a trade was consummated resulted in the system of deferred payments, the seller accepting in lieu of his goods a promise in some form which, in his estimation, is equivalent to the thing itself. The farmer who takes a load of produce to market may be willing to let his account with the buyer run, and take in exchange at some future time the things he needs; and there arises the book account form of credit. He may take the buyer's note, and there arises a negotiable instrument. He may accept a check on a bank, and there comes into being another form of credit instrument, in wide use and in popular favor. He may take the promise of a bank to pay money—coin on demand—and there is issued to him another form of credit instrument, the bank note; or he may take a greenback, which is a Government promise to pay money. It is for him to decide who his creditor will be, but most likely it will be a bank. But whatever form the payment takes, it will be some variety of credit, unless the matter is settled in gold or silver, which is not the common practice.

If he were a European farmer he might draw a draft on the merchant, which the latter would "accept," and the farmer could either keep it until maturity, or sell it to a bank, and in this we would have acceptance credit, as described hereafter in detail.

If the farmer becomes suspicious of the merchant, he will ask that the book account be settled; if he questions the ability of the maker of the negotiable instrument to meet it at maturity he will either refuse it or ask a surety; if he questions the solvency of the maker of the check, or the soundness of the bank, he will cash it or have it certified as soon as possible; if he questions the bank's ability to meet the

notes issued by it, he will ask for gold; if he distrusts the greenback (as many did in 1893) he will also turn it into gold.

Confidence in the instrument is the basic point, and as long as this confidence exists the credit instrument will answer all the purposes of money, and be cheaper.

And so these periodic panics, particularly banking panics, are due to the distrust of the community in the ability of the debtor to fulfill its engagements. The general desire on the part of the people at such times is to change their debtors. A run on a bank is simply this and nothing more. The people prefer to trust the bank on its notes rather than on deposit account, and so withdraw their deposits. If they distrust the bank note, they will ask for gold.

A general liquidation is therefore a general change in the relation of debtors and creditors.

TRUST THE BASIS OF THE CREDIT SYSTEM

In the end someone must be trusted. The laborer must trust his employer from week to week, that he will get his wage at the appointed time; the clerk or salaried man trusts the firm from month to month. The physician trusts his patient, the minister his congregation. The farmer trusts the wholesaler, and the jobber the retailer. The retailer trusts the consumer and the consumer trusts the employer, so that it completes the cycle of credit—trust that at the appointed time payment in money or its equivalent will be made, and this confidence is the very bed-rock of all national and individual well-being. And in the confidence that men will keep their engagements business moves. Moreover, out of this system of trusting, interest as a compensation for the use of money or credit arises.

It is the business of the bank to deal in money, credit and credit instruments; to safeguard metallic money and create "paper money"; to buy credit instruments and lend its funds on the strength of credit instruments. A bank is an institution where deposits of money are received and paid, where credit is manufactured and extended to borrowers, and where the exchange of property is facilitated. Having first acquired the confidence of the community, the bank extends its credit by purchasing interest-bearing securities,

mainly business men's notes, payable at a fixed time, and giving the sellers the right to draw checks upon itself payable at sight. The amounts thus authorized to be drawn are termed deposits, the bank being liable for them in the same way as for actual money deposited. It is found in practice that a bank may safely extend its credit to an amount much larger than its cash on hand, the excess being an inexpensive but useful addition to the world's instruments of exchange.¹

MANUFACTURING CREDIT

We have said that a bank is a credit manufactory. This is its chief benefit to the community at large. It has the power to create credit, to make it effective.

The ordinary American bank, whether a national bank, a State bank, a trust company or a private bank, is an organization designed to collect the unemployed funds of the community in which it is located and to lend these funds to the borrowing community, which in a general way may be classified as the trading element of that community. In short, the business of banking embraces primarily the function of collecting and lending capital. Banking, therefore, is the business of dealing in credits.²

Let us follow briefly this creation of credit. Let us suppose that an individual starts a bank—to all intents and purposes as effective a credit machine as a corporation. He has \$10,000 capital of his own. His cash deposits reach the sum of \$50,000 and he has thus \$60,000 in cash, consisting of gold, silver, gold and silver certificates and other forms of currency. He knows that as a general rule all the \$50,000 deposits will not be called for at the same time. Ordinarily this is true, and payment of only a small part will be required at one time; but when a larger portion than was anticipated is called for, suspension of payment results. Moreover, there will be deposited daily, as a rule, about as much as is drawn out, so that the amount of cash is at the \$60,000 point most of the time. The banker argues that if with \$10,000 of his own and a reputation for honesty and

¹White, "Money and Banking," p. 226.

²J. H. Talbert, Vice-President National City Bank, New York, lecture before New York Chapter, American Institute of Banking.

business sagacity, the public will trust him with \$50,000 on the strength of his original capital, he can further extend his operations by using the whole fund as a basis of credit. He can begin to operate a credit machine. His statement would now appear as follows:

ASSETS		LIABILITIES	
Cash on hand.....	\$60,000	Capital	\$10,000
		Due depositors	50,000
Total	\$60,000	Total	\$60,000

OPERATING A CREDIT MACHINE

The banker now begins to discount promissory notes and to make loans. He has found by experience that \$10,000 in cash meets all his liabilities, and he can therefore safely extend credit to four times his cash holdings. He does not pay out money for the loans he makes, nor for the discounts, his clients being satisfied, and preferring to have credit on his books for the amount, against which they can draw their checks. The proceeds of the loans are placed on deposit and we therefore find his statement to be as follows:

ASSETS.		LIABILITIES	
Cash on hand.....	\$60,000	Capital	\$10,000
Loans and discounts.....	200,000	Due depositors	250,000
Total	\$260,000	Total	\$260,000

If by this process the banker with but \$60,000 in money has created something that will take the place of money in payment of obligations, he has created a new force in the world, and this force is credit. If all the depositors should draw their checks for the full amount due them and put them in circulation and they came home for payment in a short time, with but \$60,000 to meet them, the banker would soon become insolvent—unable to meet his obligations; but against the debts he has incurred he has obligations due to him; and he, therefore, has taken the loans and discounted the notes with a view to their maturity, and out of the proceeds of the maturing loans he expects to pay those who present checks. There is, therefore, a constant inflow and outflow of cash, the one offsetting the other.

Just what proportion of cash he must keep on hand to be safe, is the art of banking. To keep his assets “liquid”—

that is, running all the time, so that as funds are demanded funds will be received—this is to keep a bank safe. If too large a portion of cash is on hand, evidently the profits will be less; if too little, a heavy demand cannot be met without sacrifice of some of the securities or calling loans. Some banks in the war period of 1914 had as high as fifty-one per cent. of their liabilities in cash—a very large and unprofitable amount. They were fearful that heavy demands would be made on them, and, therefore, allowed cash to accumulate until satisfied that there was enough. On the other hand, however, in ordinary times as low as fifteen per cent. is sufficient, and in savings banks, with the notice of withdrawal permissible by law and the widely scattered depositors and the constant inflow of cash, a reserve of less than ten and as low as five per cent. is sufficient.

The checks which are drawn against the deposit liability of the banker are as effective as the cash itself to settle debts. They do not circulate with the same freedom as money, inasmuch as they are of non-uniform denomination, and not so widely known as bank notes, and subject to fraud and forgery; but they are a very potent force in the business world, it being estimated that fully ninety-five per cent. of the transactions are carried on by their use, and in the wholesale trades in some sections ninety-eight per cent. of the bank deposits are in form of checks.

FORMS OF BANK CREDIT

As a credit machine the bank creates two main forms of circulating credits: bank notes and checks. The bank notes are merely its promises to pay on demand. The checks are simply the representatives of the book accounts. Thus, I have an account with a bank. The bank owes me so much money. The evidence consists of my account on its books and its account with me in the pass-book furnished for that purpose. I draw my check as my lawful right and send it to my creditor. I put that much of my account in circulation. It passes from hand to hand, place to place, until it comes back to the bank for payment, when the debt to me is cancelled and the instrument no longer in effect.

It is the same with the bank note. I borrow, say, \$100 from the bank. I receive in return for my note the prom-

ises of the bank to pay to bearer the amount, which is represented by twenty of its promises to pay to bearer \$5 each on demand. I pay one debt after another, and place these in circulation. They remain out longer than my check, for anyone will accept them at their face value, and consequently they circulate more widely than my check, which has no standing where it is not known; for while checks come home quickly for payment, bank notes remain out longer. But both are obligations of the bank to pay money.

BANK-NOTE CREDIT

The banker, therefore, creates a very powerful form of credit in the bank note, which is nothing but his promise to pay to the holder of the note the amount named. It is, of course, issued in more elaborate form than the check, and is usually finely engraved to prevent counterfeiting. It may be secured by a general lien upon the banker's assets, as in Canada; by a deposit of Government and other bonds, as in the case of the national bank notes; or by a combination of bonds and commercial paper, as in the case of the emergency currency issued by the banks in the summer of 1914; or by part gold and part commercial paper, as will be the notes issued under the new Federal Reserve Bank System, and as now obtains in Germany; but the elementary principle is the same in all cases—it is a promise of the bank to pay. There may be a fund held by some central authority out of which the notes will be paid as presented; or a fund lodged to guaranty the payment of all notes issued by all banks, as obtains in Canada; but the point we now emphasize is the fact that by issuing notes the bank incurs the same obligation that it does in certifying a check, or in allowing its depositors to draw on it.

The obligation of the bank on the checks of its depositors and on its notes is identically the same—both are demand obligations. The customer issues his checks as needed, while the bank only issues its notes on request where checks (deposits) will not answer. For instance, a customer wishes a loan of \$1,000 for the purpose of paying off the farm hands. Checks will not do. Wages, as a rule, must be paid in money. Therefore, the banker issues \$1,000 of his own promises to pay—bank notes. Gold and silver might be

given, but both are heavy and cumbersome. Therefore, people generally have come to prefer paper money to metallic, using the latter chiefly for small change operations.

The farm hands pay their grocer and butcher, who may in turn pass the notes on, or deposit them in the bank; and thus in due course they will come back like the check, and if the holder so demands, will be paid in coin as the promise contemplates.

The bank notes will be paid out of the same fund as the checks, it being the privilege of the borrower to name which form of bank credit he prefers. The banker has no option in the matter, but inasmuch as he deals largely with his own customers, he takes it for granted that most of his loans and discounts will become deposits. It matters but little to the banker which form of credit instrument is issued, but the bank check is less expensive than the notes, there being no tax on the former; but the latter stay out longer and are usually considered distinctly profitable in their issue.

AN EXCHANGE OF CREDITS

When the banker makes a loan or a discount he merely exchanges one form of credit instrument for another. For instance, he takes my note for \$1,000 and hands me \$1,000 of his bank notes. The obligation I have assumed to him is an asset; the obligation he has assumed on the notes is a liability. The one appears on the left of the statement; the other on the right. And in the discount operation for cash (bank notes) the bank has exchanged its notes for my note.

In the discount of commercial paper, the bank has exchanged a less-known credit for a well-known credit. The credit of the maker of the note is not generally known, and, as in cases where commercial paper is bought in the open market from brokers, the credit of the maker is more or less a banking secret. The banker passes upon this credit, and becoming satisfied that it is good, issues in return for it his own credit instruments, and he has thus turned an unknown into a known credit. He has made a non-circulating credit circulating. He has made the credit divisible, usable and good.

Bank notes, like checks, stay out only so long as they are needed. The individual who has a check, as a rule, deposits

it promptly for collection; at least he should. He does not want to carry it around; it is idle money to him; he does not want to take the risk of the bank failing before the check is paid, and so sends it home promptly for redemption. The bank note follows the same rule. It circulates only so long as it is needed. If there is an active demand for money, as, for instance, in moving crops, there will be large amounts of bank notes issued. As soon as the holder has no further use for the notes he deposits them in his bank, which in turn forwards them for redemption to the issuing bank (through the Treasury Department at Washington), and so bank notes appear and disappear as business demands, and checks likewise.

CERTIFICATION CREDIT

The bank not only creates credit and credit instruments, but certifies to credit. In the certified check it exchanges its own for the maker's credit. The credit of the merchant or tradesman may be more limited than that of the bank, and by certifying to the maker's credit, it makes it more acceptable. It supplants his credit with its own.

This function is quite largely an American development. The certifying of a check is simply adding "accepted," "good," "good when properly endorsed," "certified," etc., on the face, after which when properly signed it becomes the obligation of the bank and not of the depositor. It means in banking practice that the bank has charged the amount to the drawer's account and credited the same to "certified check account," and holds the fund awaiting the return of the check for payment. It is most commonly used in Stock Exchange transactions, such operations being carried on quite largely by the use of certified checks.

In the certification of checks the banker has, therefore, simply certified to credit. He has created no new credit, but a better class. The credit must be existent when the certification is made, and the act of certification in effect says to the world: "The depositor whose name appears as maker of this check has the amount to his credit in this bank. The signature is genuine. We certify to the same and agree to pay to the party to whose order this check is regularly indorsed the amount for which we have certified. The maker is discharged of his liability and we assume it."

It can readily be seen that this results in the check having a wider and freer circulation than would the maker's individual order; for his was an order, while the bank's certification has made it a promise. And certified checks to a very large extent circulate as money, being freely accepted, and are the medium of the large payments, as bank notes are the medium of the small.

Of course, there is such a thing as a false certification, made in fraud, and this has no weight to bind the bank; but the certification, if regular, works as above noted, and the bank is responsible for the amount of its certification even though it has certified a raised check. But the bank could only charge the maker in the amount originally drawn.

Having established his own credit, the banker thus trades upon that credit, by adding to, or supplementing, the credit of others, and he thus operates a credit machine.

ACCEPTANCE CREDIT

One striking difference between European and American banking lies in the form of credit extended. In the American bank a loan is primarily a cash advance. The banker may not actually lend the cash, but he must stand ready to redeem the checks drawn against the credit which he passes when a loan is made. If he is asked for a loan, he looks in his till, and if he finds a dollar he may lend four; and if he lends four, he must keep one in his till. Our system of reserves requires it. He must regulate his affairs according to his cash; while the European banker lends his credit. He does not concern himself about the cash, for the contract of the one for whom he makes the advance is that he will have the funds in the banker's hands when the acceptance is due.

The acceptance is highly developed in European countries, being a very common form of credit instrument. The operation of a bank acceptance will be seen by taking a typical English case. Let us assume that an importer of coffee in London is about to bring in a shipment from Brazil. He is in good standing at his bank and arranges the transaction through its office.

The bank agrees with him that upon the presentation of a draft with documents attached, signed by the seller of the

coffee, they will accept it, and give him an instrument called a "letter of credit" to this effect. He sends the letter of credit to the coffee merchant in Brazil, who draws a bill of exchange on the London merchant, ships the coffee, attaches the bill of lading and insurance papers, and takes them to his local bank. The local bank being assured of having the bill taken care of in London, buys it of the coffee merchant and forwards the draft to the London bank for acceptance. Upon reaching the latter, it will be "accepted," after which it can be sold in the open market; for having the acceptance of a well-known London bank it becomes "prime" paper—the very best.

Let us see what this means. The bank has parted with no money. It has simply agreed that at the end of three months from the date of acceptance there will be paid at its banking house, to the holder in due course, the amount of the bill. The merchant for whom the acceptance was made has agreed with the bank that he will have the funds in its hands to meet the acceptance. By arranging the acceptance the merchant may obtain the goods and in the course of the term of credit turn them into funds, and with the proceeds of the sale make provision for the debt when due; and he has, without involving any money of his own, except his business capital, carried through a business transaction.

The bill might have been drawn on the buyer and accepted for his account by the bank, or upon the bank direct; but by writing its name across the face the bank has given new power to a credit instrument—put it in position to circulate freely in the money market, and be taken without question by anyone looking for an investment.

For thus lending his credit the banker will charge usually a quarter of one per cent. for three months; but since it involves no cash, but only credit, it is all profit to the bank. The rate at which paper bearing a first-class bank acceptance will be discounted is so favorable that it will be profitable for the merchant to pay the bank's commission in order to obtain the lessened discount rate.

The acceptance form of bank credit is not as yet a factor in American banking methods, but under the Federal Reserve Act and the New York Banking Law banks may make these acceptances and are already doing so, there being upwards of \$15,000,000 in banks and trust companies in

New York on July 1, 1914, when the State system had hardly begun to operate, and the Federal Act not then in active operation.³

This power to make an acceptance is the highest form of bank credit and enables a bank to capitalize its credit and make it effective. Imagine with what readiness a draft accepted by the National City Bank of New York would sell anywhere. The buyer would not care who made the draft, or on whom drawn, as long as the name of the National City Bank appeared thereon it would pass in any market where the National City Bank was known. And all this without the use of a single dollar of money. The great London banks have out in acceptances about \$100,000,000 all the time, and by so doing they add this much to the working capital of the country.

In times of stress these acceptances may be discounted freely at the central banks, being "two-name paper" as required by their rules; and by the rediscount system they are turned into a circulating medium—bank notes, freely accepted everywhere.

In the acceptance credit we have a form of pure credit, although it may have security ultimately back of it; but as it operates, it is essentially credit, being based upon the standing of the acceptor, as a promissory note is based upon the credit of the maker.

THE LIMITS OF BANK CREDIT

There is a limit to bank credit in this country, based upon our system of rigid reserves, which until the enactment of the Federal Reserve Law was as high as twenty-five per cent., now reduced to eighteen per cent. Part of this could be kept in other banks, and part in cash in the vaults; but the reserve must be maintained as a matter of complying with the law. But whatever the amount of the cash in reserve, it is obvious that the bank with \$60,000 in cash cannot meet a sudden demand on the part of its depositors for four times that amount unless it can quickly obtain the money due it on loans. These may not mature quickly enough to satisfy the demands of depositors, and nothing but bankruptcy fol-

³On March 6, 1915, the acceptances of the Federal Reserve Banks constituted 23 per cent. of the commercial paper held, which amounted to \$25,731,000.

lows. If there can be found a way by which these promissory notes may be turned into money before they are due—their payment anticipated; if the bank which holds them can sell them to some other bank that may have money to spare, such a condition can be avoided.

There has probably never been a case where all the bank's deposits were called for at one time, but something approaching it was experienced in 1907 when one bank paid out as high as seventy per cent. of its deposits in a few weeks. This is said to have been the most memorable run ever experienced by a bank without closing its doors.

Up to the present time, we have had no institution or class of institutions equipped for rediscounting, and banks facing a sudden demand for liquidation by depositors could only gain help by selling (rediscounting) their note holdings to a correspondent, or by selling securities. The former might not be possible and the latter costly. But under the Federal Reserve Act a bank can now send the paper it holds to its Federal Reserve Bank for rediscount, the latter making payment for the same by issuing its notes on the security of the commercial paper so deposited. In other words, on the strength of the promises of a number of approved merchants and others to pay a certain amount at a certain time, the Federal Reserve Bank will issue its notes which promise to pay on demand a specified sum. This is the principle of the clearing-house loan certificate elsewhere described. Thus we have a bank and a central bank creating credit instruments, making circulating credits out of fixed credits, backed in the main by other credit instruments—promises to pay—and ultimately gold.

There is thus a limit to a bank's discounting powers—this limit being the probable call of its depositors. The law may estimate that twenty-five per cent. cash on hand is sufficient; but the banker himself must be the best judge. The penalty for over-discounting is the probable difficulty that might arise if more than the estimated portion demanded their money at one time. The advantage of large discounts and low cash is the profit that arises; for the larger the loans and the less the idle money, the more the resultant profit to the bank. In England there is no law as to reserves, the banks being free agents, regulating their reserves according to the conditions, expanding and contracting as

the occasion warrants; and English banks have an enviable reputation for the quality of their administration.

But the great central bank stands as the backbone of the banking system, operated not for profit but service, and which can and in Europe does carry large cash reserves (in France as high as seventy-five per cent. at times), so that demands can be met and rediscounts made under all conditions. The strength of the Bank of England was never better shown than in the present war, during which it has accumulated the largest gold fund in its history, discounting at normal rates, and throughout the crisis proven its title as "the greatest bank in the world," because greatness in institutions as well as men is measured by the way they conduct themselves in trying times.

THE CLEARING OF BANK CREDITS

The bank, in its broadest sense, acts as a credit clearing-house. The scope may be local, national or international; but its function as a credit machine is to offset debits against credits, and the process that obtains in a small compass operates in a wider sphere. Let us suppose that there are ten merchants in a town doing business with each other. They all have accounts in the local bank. They buy and sell among themselves, and in payment give checks on the bank. These are deposited, and all the bank does is to charge the one and credit the other. It "clears" the credits. If they should all go out of business, the bank would pay each, in cash, the net balance that resulted from their operations. In other words, it would "settle" the balances in cash. And expanded to its ultimate horizon, this is what the bank does as a credit-clearing machine.

The bank receives checks from all sources, particularly its customers, and sends them for collection through routes and machinery described in the chapter on checks; but it does not ask that the checks be paid in money; all it wants is a draft on some large city bank. If two banks are in the same town, each morning they will exchange checks, and the balance will be adjusted by the debtor bank drawing its check on its reserve correspondent in settlement. In some cities operating clearing-houses, checks will be exchanged through the clearing-house, the banks which owe balances,

sending their draft to the clearing agent, and the clearing agent settling with the creditor banks. No money passes, the drafts on New York, Chicago, or other large city, being the medium of payment. In large cities only the net balances of clearing operations are paid in money. Checks deposited by customers are credited to their accounts; notes are collected and credited as a deposit; checks drawn by depositors are paid by clearing, or by drafts, as above noted; bank notes are issued on the credit of the bank, and so banking from first to last is a credit operation.

INTERNATIONAL CLEARINGS

While the clearing process may seem complex, especially in foreign exchange transactions, it is based upon the fundamental proposition of two men meeting and adjusting their debts. In the place of men, however, we have banks, communities and nations. If merchants in the United States sell to merchants in England a million dollars' worth of goods, and English merchants sell our merchants five hundred thousand, obviously England as a mercantile community owes the United States half a million dollars. Our bankers might be and generally are satisfied to have credit with English bankers for the amount, against which they can sell exchange—that is, take money on this side and give orders on the English bankers which the latter will honor. But if the American bankers should want payment in cash, gold would be sent by steamer to New York, and we would thus have a “gold movement.”

The elementary principle throughout all these transactions, from the settling of a debt between two merchants, by one giving the other a check on his bank, which is deposited in the same bank; the merchants of a city settling their debts the one against the other through the medium of the banks; the banks settling through the clearing-house; the settling of balances due from place to place, country to country, through the selling of bankers' orders, involves the same idea—an exchange of credits. Banks are the medium through which these exchanges are made, money being used, if at all, only to adjust the net balances.

This credit machine is a wonderfully delicate machine, and of great usefulness. It moves silently and effectively,

and works perfectly under ordinary conditions, and only under such unusual conditions as are brought about by a great war is the equilibrium disturbed. By gathering the idle capital of the community as deposits, and thereby supplementing its own; by creating credit instruments; by extending credit; by certifying checks; by keeping its reserve as a safeguard to its credit operations and by paying its depositors' checks, the bank acts as a vast credit machine in the mercantile world—a public benefactor as well as a source of private gain.

CHAPTER III.

BANKS, BANKERS AND BANKING

The four most important industries are agriculture, transportation, manufacturing and banking. Agriculture produces the raw material; transportation carries it to the manufacturer and to the consumer; the manufacturer turns the raw material into finished and usable products, and banking provides the financial and credit machinery by which these processes are made possible. The peculiar function of the bank is to furnish the capital and the credit. The other industries employ it. Without the bank, trade and industry could not have attained the present high state of development, for banking has been the chief motive power in the advance of material civilization.

The marvellous development of Germany as a nation demonstrates this fact; and that development is largely due to the interest taken by the banks in the material welfare of the country. The German banks are closely connected with all sorts of improvement schemes. They are represented on the board of directors; they keep in close touch with the businesses which they have financed. For instance: a steamship company is formed to operate a new line of steamers. The bank becomes, in a sense, a partner. It provides the capital necessary to develop the company, taking back bonds or stock in payment. When the project is finished, the securities are sold to the clients of the bank, with the latter's moral, if not legal, guarantee that the proposition is sound and worthy of investment, and a new fund is in hand for another work. By thus getting close to the actual work of development, these banks have played a most, if not the most, important rôle in the marvellous growth of the German Empire.

BANKING MACHINERY NECESSARY

It is not enough to produce—to manufacture—there must be the financial machinery to carry the burden of growing the crops, of taking to market, of turning raw material into usable form, all of which calls for credit, which

credit can best be furnished by banking; for by the operation of banking credit, one dollar of money does the work of four, and by using money as the basis of credit, credit may, in ordinary times, be extended on the ratio of four to one, thus multiplying the usefulness and effectiveness of metallic money fourfold. Banking makes money a potent force. It makes credit elastic and safe.

THE PRIVATE BANKER

The first bank was a banker. The individual who conducted a banking business as part of his mercantile operations soon found that he could employ more capital than he had, and so he associated others with him. It thus became a partnership. In the course of time it was found advisable to incorporate under the banking laws, or to apply for special charter (in early days most banks were created by special act), in order that the business might be perpetuated and that it might expand with the changing needs of the community.

Banking was originally a common law right. Any citizen could be a banker—if his neighbors would trust him; but the business being more or less of a public character, inasmuch as it deals with money, credit and credit instruments, and by the functions it enjoys touches the public intimately, soon became a special privilege, granted by law or the legislature. While some men could be trusted to use these privileges wisely, it would not do to permit anyone to receive deposits, issue notes and loan money, for the power would be abused. Therefore, public control, both in the granting of the privilege and inspection thereafter, became necessary for the common good. Even as late as 1913, the right to do business as a private banker was not restricted or supervised in the great State of New York, and only grave abuses at an opportune time led the revision committee of 1914 to make adequate provision for the regulation of private bankers.

There are many cases, however, where the community would not have banking facilities at all, were it not for the private banker, who combines banking with other business, and fulfills a very necessary place in the community's life; but with the capitalization requirements only \$25,000 for

country banks in the National Banking Act, and in some places but \$10,000 under State laws, the organization of a bank is not a difficult matter; and in many, if not most, small towns and villages the incorporated bank will now be found. But the day of the private banker is over, for in the course of events the corporation has become the recognized form, and only those who are already in the business are likely to operate as such. And even these are taking on the corporate form as time goes on.

Not only was banking once incidental to other business, but the legislatures were often hostile to granting bank charters, and only by subterfuge could a bill be gotten through. Thus the famous Chemical National Bank was originally the banking department of the New York Chemical Manufacturing Company. The Farmers Loan and Trust Company was the banking end of the Farmers Fire Insurance Company. The most notable case is that of the Bank of the Manhattan Company, which was chartered primarily as a water company with banking privileges, but developed its banking function much more rapidly than its water works, whether by design or not is not the question; the fact remains that it is a large and influential bank at present, but the original well and the tank on the roof still remain as evidence that it is a water company primarily and a bank secondarily, by charter if not by practice. The charter after granting it powers incidental to a water company empowered it "to utilize its surplus funds in the purchase of public or other stocks, or in any other moneyed transactions or operations, etc." And thus an innocent appendage to a charter to operate a water company opened the door to banking functions. For thirty years it was a water company, but for a century it has been a bank.

BANKS DISTINGUISHED

We must distinguish between those institutions which in a sense create capital, from those which work on capital already accumulated. Of the former class are to be mentioned particularly the mutual savings banks, which have no capital, and whose funds are obtained by receiving the savings of the small depositor and combining them into a com-

mon fund large enough to make profitable and effective investment in mortgage loans and other securities.

The banks of discount and other capitalized banking institutions have as the foundation for their operations the funds which have been in a sense made capital prior to investment in the enterprise. The stockholder in a bank of discount has saved his money until he has accumulated a fund sufficiently large to make investment in a bank possible. He must have at least \$100 in order to become a member of the corporation, while the savings bank opens its doors to the man with one dollar and often to the child with ten cents. In the one you must be a small capitalist before "joining the bank," while in the other you become a small capitalist through the bank. The savings bank is the receiving reservoir for the little streams, out of which pours the larger stream, while the bank of discount utilizes power already assembled. In the savings bank every depositor is in a sense a stockholder and stands on the same footing; while in a bank of discount the depositors are creditors and the stockholders are owners. The savings bank depositor is a partner; the bank of discount depositor is a creditor. The savings bank agrees to pay back the money on due notice; the bank of discount on demand. The savings bank is a mutual investment concern more than it is a bank; while the bank of discount and the trust company as generally operated, are essentially banks. The savings bank never discounts notes, nor issues money, nor, as a rule, does it allow checking privileges, although in some States it does make collateral loans to a considerable degree. In New York this is permissible, but not indulged in to any great extent.

We do well to get the distinction between the two clearly in mind, for much confusion and misunderstanding of the nature and functions of a savings bank have existed, and the line of demarcation is sharp and well drawn. Having the differences between the two classes of institutions clearly understood we are the better able to take up the functions of a bank of discount.

BANKS DEFINED AND CLASSIFIED

Banks may be divided into seven classes: (a) Banks of discount, comprising national banks, State banks, private

and individual bankers. (b) Trust companies. These in most, if not all, instances do a banking business, and in connection, a trust, and in some cases, a savings bank business. (c) Savings banks, which are essentially investment institutions, receiving small deposits for coöperative investment. These are further divided into mutual and stock savings banks, the latter predominating in the West and South, and the former almost exclusively in the Eastern and New England States. (d) Building and loan associations. (e) Mortgage companies. (f) Safe deposit companies. (g) Loan companies, personal and chattel.

A *bank of discount* may be defined as a moneyed corporation, authorized by law to receive deposits and pay checks; discount and negotiate promissory notes, drafts, bills of exchange, and other evidences of debt; to lend money on real or personal security; to buy and sell gold and silver bullion, foreign coins and bills of exchange; to issue its circulating notes; to make collections; and such other moneyed transactions as are not inconsistent with its charter or the laws under which it operates.

Horace White, in "Money and Banking," defines a bank as "An institution where deposits of money are received and paid, where credit is manufactured and extended to borrowers, and where exchange of property is facilitated. Having first acquired the confidence of the community, the bank extends its credit by purchasing interest-bearing securities, mainly business men's notes, payable at a fixed time and giving the sellers the right to draw checks upon itself payable at sight. The amounts thus authorized to be drawn are termed deposits, the bank being liable for them in the same way as for actual money deposited."¹

In "The Savings Bank and Its Practical Work" the author of the present work defines a *savings bank* as "A mutual coöperative institution conducted without profit to the managers, for the purpose of receiving on deposit and for safekeeping such sums as may be offered, limited by the law of the State, and investing the same for account of the depositors jointly and severally in such manner as shall be prescribed by law, and paying to the depositors as interest all the earnings of the institution except the amount paid

¹White, p. 227.

for expenses and such part as may be set aside and held in reserve as a guaranty fund for the benefit and protection of all."

Technically speaking, a *trust company* is a corporation organized for the purpose of accepting and executing trusts, acting as trustee under wills, bond issues, registrar of bonds and stocks, executor or administrator of estates, etc., although by law and practice trust companies may do a general banking business, but do not issue currency.

Building and loan associations are mutual organizations formed for the purpose of assisting men to own their own homes. They accumulate savings and in many cases do a savings bank business, but they are essentially for the purpose of helping a man save by regular monthly installments for the purpose of home ownership, lending only to members on real estate security.

Mortgage, or mortgage investment companies, are defined in the New York law as "corporations other than an insurance company formed under the laws of this or any other State for the purpose of selling, offering for sale, or negotiating to individuals other than bankers, bonds or notes secured by deeds of trust or mortgages on real property or choses in action, owned, issued, negotiated or guaranteed by it, or for the purpose of receiving any money or property, either from its own members or from other persons, and entering into any contract, engagement or undertaking with them for the withdrawal of such money or property at any time with the increase thereof, or for the payment to them or to any person of any sum of money at any time, either fixed or uncertain."

Safe deposit companies are those renting out safes in vaults for the protection of valuables in any form.

Personal loan companies are those which make a business of loaning on personal security to needy borrowers, generally in small sums. Of this class are pawnbrokers and other lending concerns which loan on pledge of jewelry, etc., or personal indorsement of a third party. This work has particular reference to banks of discount, but aside from the trust functions, applies equally to trust company operations.

THE FUNCTIONS OF A BANK

The functions of the bank are fourfold: (1) To assemble capital and make it effective. This it does by assembling capital of its own, and by attracting idle private capital. In the organization of a bank the stockholders "subscribe" to the stock, which simply means that they unite their private capital with that of the other stockholders, so that the aggregated fund becomes the "capital stock" or "capital" of the bank. The stockholders are the partners in the enterprise. The profits, if any, belong to them; the losses, if any, must be shared by them. In proportion to their holdings they are entitled to the profits and likewise must be accountable for the losses. As a general rule the liability is twice the amount of stock held; that is, if a stockholder owns \$500 worth of stock, he is liable to have his stock cancelled and be subject to an assessment of \$500 in addition, in case the bank fails. This is generally spoken of as the "stockholder's double liability." With this fund as a starting point, the bank is ready to do business. It loans this fund to borrowers and thus makes its profits. But if the capital fund were all the bank had with which to work, it would not prove a profitable undertaking, for after deducting expenses and losses, the profits, if any, would be small. It, therefore, invites the public to open accounts with it, and it thus assembles another fund, the deposits, which it employs in making loans, buying securities, etc., so that we have not only an additional fund, but another function of the bank, i. e. (2) To receive deposits. Contrary to the prevailing idea, the bank does not receive the money offered it for safekeeping. Neither does it receive the fund for mutual investment as is the case in mutual corporations such as savings banks; but the bank of discount in receiving the deposit becomes the absolute owner of the fund, and the relation of debtor and creditor is established between the bank and the depositor. The bank thereafter owes the depositor the amount, and agrees to pay the same upon demand.

It is interesting to note in passing, that while fully ninety-five per cent. of the force of the bank is engaged in the work arising from the ramifications of the deposit function in banking, their efforts produce no income except the incidental item of "Exchange." It is the service rendered by

them, however, which in a large measure attracts and retains the balances which make possible the exercise of the discount and lending functions.

BANK DEPOSITS

The deposits of the bank are divided into three main classes, namely, general, specific and special. The general deposit is the most common. The bank receives the fund deposited as its debt to the depositor, mingles the money with other funds of like nature and pays the depositor as he orders, usually upon his check, which will be treated subsequently.

The contract with the bank in general deposits is never that of a bailment, where the bailee receives property with the agreement to return the same identical thing. In the case of a bank deposit the agreement is simply to return money of equal value.

In case of insolvency of the bank every general depositor is a creditor of the bank. Technically every creditor is a general creditor. If one is entitled to payment in full, it is either because the bank holds a special deposit or security, which has always remained the depositor's property, the bank being bailee under agreement, or because the bank violated a trust and by reason of the wrong holds a special fund which belongs to the depositor. In a national bank all general depositors and other creditors share alike. In some States the depositors in State banks are by statute preferred over other creditors and are paid in full before other claimants.

Frequently when a bank fails attempts are made to establish rights to preferences by showing that certain deposits were special deposits. But the ordinary manner in which banks do and in these days must do their business, to satisfy the demands of commerce, facilitate negotiations and meet the customs which present-day business methods require, and the general intentions of those who do business with banks, when sifted out, will show the fallacy of this claim for preferences, as well as the obvious injustice of the claims.

Even though the money is deposited for a specified time, or upon unusual conditions, if there is no understanding that

the money is not to be mingled, the bank will mingle the amount received with the general mass of its property, and in most States the deposit is a general one, to be repaid out of the general mass of the bank's assets.²

The fact that a general deposit is a debt has been held by the courts the country over, and as in the case of all debts, it can be extinguished only by payment.

A specific deposit is a deposit made for a specific purpose, and the bank has instructions to apply the fund for that particular purpose and no other; as, for instance, to pay off a mortgage, or to pay a note of the depositor. The money cannot lawfully be mingled with the funds of the bank, it being a separate fund for the particular purpose.

Special deposits are those where the identical thing is to be returned. It is in a sense a bailment. Thus, if money were left in a package; bonds or stocks, etc., left with the bank (not in its safe deposit vault but with the bank as a bank) it would constitute a special deposit with it, if the articles or money were left on such conditions.

Having distinguished between the various classes of deposits, we are concerned mainly with the first class, namely, the general deposits, for these carry another important function as well as duty of the bank, i. e., to make payment when, to whom and in the amounts designated by the depositor, commonly called the (3) Checking function, which has grown to such proportions, and is such an economic necessity, that it may be considered one of the elemental and most important functions of banking, although it necessarily follows the deposit function.

Briefly stated, the checking function gives the depositor the right to draw checks on the bank in such sums as he may choose, payable on demand, to the party designated or to bearer, together with the right to rescind the order before payment, and the bank is bound to pay on regularly issued orders as long as the maker has credit for the amount named with it.

(4) The function of discount, which includes the loan, the distinction being trifling between the two. In a discount the process is usually as follows: A presents a note payable to his order to the bank and asks, not that the bank

²The Law of Bank Deposits, Weitzel, p. 8.

make a loan on it, but that the bank discount (buy) it. This it does by deducting the interest from the amount and turning the proceeds over to him. If he had presented his own note to its order and asked for the money, the bank would not make a discount in the technical sense³, but loan him the amount, taking his note in evidence thereof; and whether the interest was deducted when the discount was made or collected at maturity, it would be a loan and not a discount. These advances are usually reported under the head, "Loans and Discounts," the former including demand and collateral loans as well as the time loans.

In the matter of commercial paper, the bank is frequently spoken of as "buying" the paper; while in the strict sense it has made a loan through the agency of the commercial paper broker.

The last and a very important function is the issue of money, or, to be correct, currency, commonly referred to as (5) the note issue power. Bank notes are known to have been issued as far back as 1670, when instruments of writing were issued by the goldsmiths to people who had left money in their care. These were in substantially the same form as bank notes of to-day, promising to pay on demand a specified sum. The right to issue such notes was never questioned. They were simply evidences of claims against the goldsmiths for money left in their care. As the business grew and the quantities of notes called for increased, it became more convenient to print blank forms, to be filled out with the names of the depositors and the amounts due them. Still later notes were printed for round sums—five pounds, etc.—which could be handled in quantities, and these were made payable to order or bearer, according to the wish of the depositor. The business of discounting commercial paper was added to the goldsmith's vocation very soon after the practice of depositing money with him became common, and then the notes were issued if desired to the persons getting the discounts.⁴

The principle of issuing such notes was recognized as a right, so long as anybody would take them. But experience

³It is the common practice, however, to consider all loans where the interest is collected in advance as "discounts" and where the interest is collected at maturity or periodically as "loans."

⁴White, p. 225.

soon taught that such a right was subject to abuse, as was evidenced by the early days of banking in this country, when thousands of merchants and dealers the country over put out their promises to pay, until the condition became chaotic, and it was recognized here as well as in the early days of banking in other lands, that this right to issue circulating notes was a function that for the good of all had to be regulated by the State. Banks were, therefore, chartered with implied or express power to issue notes. Other groups of individuals had this right without incorporation as a bank, it being the first function of some corporations to issue notes before being chartered as a bank. Thus, the Bank of New York issued circulating notes seven years before it was chartered as a bank.⁵

In the early days of American banking the bank was an association of individuals whose main business was to issue currency. By the grant of "banking powers" was meant the power to issue its notes, and the profit came from the power to thus issue notes, charging interest to borrowers, and in many cases without capital of its own to safeguard the issues. Without adequate redemption features, and by fraudulent practices these privileges were abused so that banking was looked upon with disfavor by legislators, and charters at times difficult to obtain. Daniel Webster is said to have observed that the power to issue notes to circulate as money was the feature which distinguished a bank from every other institution.⁶ The issue of notes is not now the function of State banks, the National Banking Act placing a tax of ten per cent. on all issues of State bank notes, so that it becomes unprofitable, and no State notes have been issued in many years. In the revision of the New York Banking Law in 1913 the sections relating to note issues in the old law were entirely eliminated, it being considered that the issue of notes by State banks in New York was no longer a probability and the law therefore makes no provision for such operations.

⁵ White, p. 225.

⁶ White, p. 217.

CHAPTER IV.

THE ORGANIZATION AND ADMINISTRATION OF A BANK

The organization of a bank may be due to any one of several reasons, such as a desire on the part of a bank man for an official position; an attorney desirous of bank patronage; dissension among the directors or stockholders of one bank, which results in a rival institution; public spirit, which appreciates the need of and benefits of a banking institution; the work of a professional promoter, etc.; but in the last analysis, the bank results from the desire on the part of those who have capital to employ it effectively through such an institution. Otherwise the capital stock could not be assembled.

There may, of course, be ulterior motives back of it all, such as a desire to secure large accommodations as borrowing directors, but the reason last noted must be controlling if the bank is to secure support from moneyed interests.

Through the agency of the bank funds which are idle are brought into use and employed profitably. Through the medium of the bank the man who needs and can use funds meets the man who has funds to loan. Thus production is greatly stimulated and capital increased. And for the bringing together the banker is entitled to his profit, as well as is the capitalist, large or small, who furnishes the means that make the banking operations possible.

It is possible to conceive a bank starting with no funds of its own, but holding itself out as willing to loan the funds of others who will entrust their property to it; but in such a process there would be no assurance of the wise use of the funds so deposited, or their return at the appointed time. And for the sake of having loanable funds at the opening of the bank, and a fund to safeguard those who will trust their money to its use, a capital fund of its own is necessary. The trouble with many of the old State banks was the lack of capital, except in the form of promises, and debts cannot long be paid by promises. And inasmuch as banking is a credit operation, and the bank a credit machine, it must have

credit before it can operate profitably and successfully, and to do this capital is necessary and a surplus or guaranty fund quite as much so.

To organize a bank, therefore, there must be an accumulation of capital which has already been gathered by individuals. As a basis of its own credit this is absolutely essential. To allow a body of men to receive deposits without some property back of their promises would be foolhardy, and the law stipulates how much capital there shall be, and regulates the capital to the place where the bank operates. This is fundamentally wrong, for the capital should not be adjusted to the place but to the volume of business. But it works out fairly well, for as a broad proposition a country bank will not have the growth that will attend a city bank.

A national bank was chartered in Oklahoma to operate on the outskirts of Oklahoma City. The capital by law was but \$25,000. In the expansion of the city the territory was included, and the bank became a city bank, and sought to operate on its old capital. The Comptroller of the Currency forbade it to continue to do business under its old capital, and suit was brought, and it was held that it must make its capital conform to its new environment, the logical result being that in a large city its deposit liabilities would increase faster than in a rural setting, and result in a top-heavy and unsound condition. The law contemplates that there shall be some proportion between capital and liabilities.

THE MEN BEHIND

A bank is merely an aggregation of men and it can be no better than its men. A bank never goes wrong of itself; it goes wrong because of the men behind it. It may be due to any one of several causes, but failure is, in the last analysis, the failure of men.

"There is no question that we as business men cannot solve," said a boastful young man just organizing a bank. And not one of the organizers was a banker by training or instinct, and yet they proposed to run a bank without the assistance of any experienced bank man. But they found—as will others—that the rules that apply to business in some forms will not fit banking; and to be able to run a factory is not to be capable of running a bank.

Most of all the men must be those who will inspire confidence. They must have "made good" in their own lines and bear a reputation for honesty, sagacity and business prudence. The man who has been "tricky" in business; who has made money by unsavory methods; who has the gambler's instinct and cannot draw the line between other people's money and his own, has no place in banking. And yet such men get in by the force of the dollar, and often carry their bank down when they must get out.

A SURPLUSAGE OF BANKS

If he who makes two blades of grass grow where but one grew before is a philanthropist, what shall be said of the man who plants two banks where only one ought to exist; and by creating the second makes them both unprofitable and great success impossible? There are many towns where one bank could serve every need, and would grow into a healthy size; and along comes a professional organizer, or a disgruntled stockholder, or an ambitious fellow, and starts another. And they both just manage to exist. Of the making of banks there seems to be no end.

But this is not to say there should not be a bank in every community. The great development of this country is due to its independent banking system, where under liberal rules as to capitalization every little town and hamlet that can raise the necessary capital can have its bank. But the first essential to the organization of a bank is that it shall have a fair chance of success. And how some banks manage to live and pay the modest rent and the salary of the cashier and a dividend large enough to satisfy the directors and stockholders, is a mystery.

THE CHARTER

The organization of a bank is a legal matter that must follow certain prescribed lines, and conform to legal requirements. The National Banking Act and the various State laws prescribe just what steps are necessary in order to form a bank. There must first be the association of a certain number of men, usually five or more, who unite themselves together for such purpose and apply for a char-

ter. The application must be made to the Comptroller of the Currency, if a national bank and to the State department which has banks in charge, if a State institution. This is generally called the banking department, and the official, "Superintendent of Banks," "Auditor" (Illinois), "Commissioner of Banking and Insurance" (New Jersey), or "Commissioner of Banking" (Massachusetts). The information generally required is the names of the proposed incorporators, the name (which must not duplicate or confuse with any existing bank in the same jurisdiction), the place of business and the amount of capital. The latter is important, and the law usually stipulates what the capital shall be for various places, it being the intent that the capital shall be large in large places and small in small places. For national banks the minimum is \$25,000 in country places, while in some States in the South and West, State banks may be formed with capital as low as \$10,000.

Upon filing the application for charter, certain formalities are necessary as to advertising, so that the banking world and especially the bank's competitors in the same district may be apprised of the fact. Duplicate papers must also be filed in the county clerk's office, as matters of record. The State official in charge of banks then looks into the matter to assure: (a) That the incorporators are acting in good faith; are representative men of business, whose connection with a bank will bring credit and probable success to the institution; (b) that it has a fair chance of success; and (c) that the capital requirements have been complied with; for it is essential that the bank have the capital fund really in hand before opening its doors and transacting business. Under the old State régime, banks would organize with capital only in the form of promissory notes, and promises are a poor foundation on which to build a bank.

The process necessary to establish a bank differs materially in the different States, so that specific description would be futile, and those interested in the subject must refer to original sources for directions in forming a bank, and follow the law most carefully. But when formalities are complied with there will be forthcoming the charter which authorizes the corporation to transact a banking business.

THE BOARD OF DIRECTORS

HAVING received permission to do a banking business, the organization of the board of directors follows, these being elected by the stockholders. The directors choose the executive officers, who will have actual charge of the administration of the bank. The magna charta of the bank is its by-laws. These are its working rules and principles. It is important that they be complete, comply with the law, and cover all possible operations in general principles.

Inasmuch as the stockholders own the bank, they are the controlling factors. They elect the directors and the directors elect the officers, and the officers select the clerical staff.

The qualifications for director in a bank differ in the various States, but the general qualification is that he shall own a certain number of unpledged shares of stock of the bank, and, in addition, must control enough votes to elect him. As a rule, the first directors are named in the certificate of organization, these serving as the first board until their successors are chosen.

The administration of a bank centers in the board of directors, the court of last resort, presided over by the president. Of late years there has been a growing tendency to create something like a "president emeritus" office, designated as "chairman of the board," the object of which is to honor one who by long service has won his spurs and desires to withdraw from the active management of the bank, but still hold a rein over the institution. He is, in a large measure, an advisory officer, a "big man," and one whose counsel in matters of finance, both within and without the bank, is respected.

The directors operate through committees of various sorts, the principal one of which is the loan committee, whose function is to pass on loans and discounts, and whose judgment may make or break the bank. It is customary to delegate certain prerogatives to the attending officers, and permit them to make loans up to a designated amount without reference to the committee: or to grant a line of discount to a certain individual or firm, it being the function of the attending officers to see that the line is kept within the limits.

It not infrequently happens that the president is the

dominating force of the bank, and his judgment obtains. If he is a man of sound judgment, a student of business affairs, he is often trusted with the management of the bank without much supervision on the part of the directors or loan committee. In fact, he is often the bank, and dominates its policies absolutely. And it sometimes happens that he rules with such an iron hand that he not only dominates the bank, but wrecks it. More than one bank has gone to the wall because its president insisted upon a certain line of action, and either in his eagerness to build up the bank or in his ambition or indiscretion in other lines, ill-advised or too liberal credits, brought his bank to disaster.

THE "ONE-MAN" BANK

The "one-man" bank has been the subject of many pointed remarks. It is everywhere to be found. It exists in the little hamlet, and in the big city. The one man may be the cashier, the president, a director, or what not, but he dominates the bank, either by force of will or force of money, or force of neglect on the part of other men.

This condition is so aptly set forth by Mr. Oscar Telling, National Bank Examiner and Chief of Reports Division of the Comptroller's Office at Washington, that I quote him at length. In an address before Washington Chapter of the American Institute of Banking, he said:

"The examiners and the Comptroller's Office alike dread the so-called 'one-man bank,' conveniently placed in one of the following classes:

"First—The family bank.

"Second—The bank whose board is dominated by an individual, usually an active officer, who controls the annual election by owning a control of the stock or obtaining such control with the assistance of the 'dummy' stockholder who gives his proxy for the asking.

"Third—The bank whose board is dominated by a 'community of interests.' By the expression 'community of interests' I wish to be understood as defining a condition usually brought about by the dominating influences on the board, or their financial associates, borrowing an undue amount of the bank's funds. In common parlance, being a case of 'you scratch my back and I will scratch yours' or 'the pouring of the bank's funds into one pot.'

“The shadow lines of these three classes of banks so completely overlap each other as to make it difficult to locate the exact line of demarcation, but when trouble comes it usually spells disaster to all concerned. Although theoretically the stockholders elect the directors, who in turn elect or appoint the active officers, in actual practice just the reverse is true, especially in the ‘one-man bank.’

“The individual, the family, or the community of interests, as the case may be, elect the directors, the result of which election is the most grotesque of all hybrid financial creatures—‘the dummy director.’”

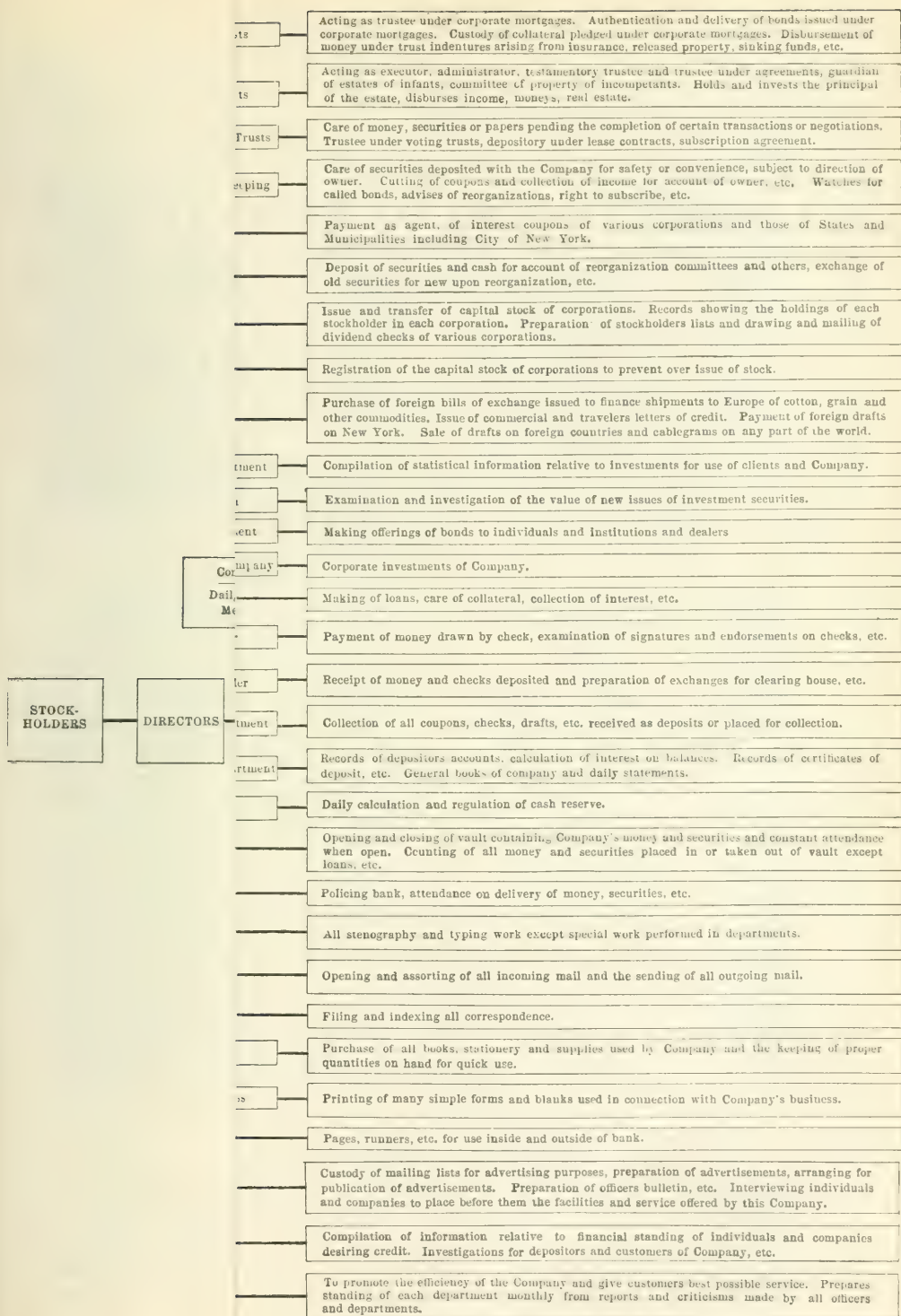
THE PRESIDENT

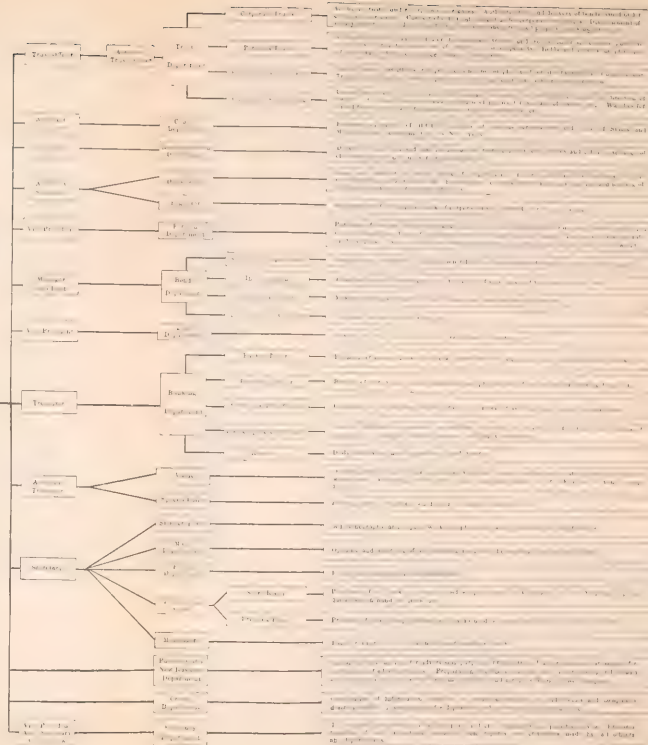
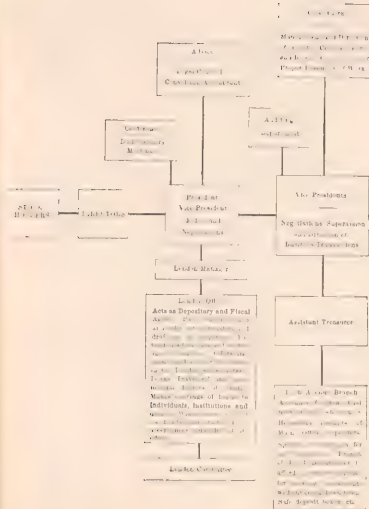
The president's duties may be simple or complex. He may spend his time running the bank or in reading the daily paper. He may draw ten thousand for knowing how, or nothing for doing nothing. He may be a banker or he may be a farmer. He may be aged and infirm or young and active. He may be the bank or only part of it; but he has certain duties defined by law, among which are: to sign certain papers; to attest certain reports and to preside at the meetings of the board. He has the by-laws as his guide and can make his office a big one or a little one as he chooses.

As a broad proposition bank presidents are chosen because of their success in other callings. Few grow up in the ranks, for most of the reputed wealth of bank presidents has been made in some other line than banking. “He made good as a druggist and they made him a banker,” is the key to many a bank president's enviable reputation. And if he made good as a druggist he might make good as a president. And again he might not. It depends upon how near the bank he runs can be run like the drug store he ran. One such made good, did good and was good, both as a druggist and as a banker.

THE VICE-PRESIDENT

The vice-president is next to the president in power, often takes his place and acts in his stead. In large banks there are many vice-presidents, who are active officers, hav-





ORGANIZATION OF A LARGE TRUST COMPANY

(Continued on opposite page)

ing certain duties to perform. Some act as credit men, out-of-town representatives, chief clerks, etc., and are part of the every-day organization of the bank.

In large banks the work of various departments, such as the credits, the securing new business, the foreign exchange, the transits, the investments, the buying of paper, and other matters of management, are frequently delegated to vice-presidents, who are often specialists chosen because of business and social connections. It is not uncommon for a bank to elect an officer from a certain section largely because of his banking connections in that section. For instance, a bank may want Southern business, and, therefore, elects to a vice-presidency, or some other office, the secretary of a Southern bankers' association, who capitalizes his acquaintance among banks and bankers.

BANKS AND BANKS

There are bank officers and bank officers. Some will take authority or assume it, and act without being told by a committee. Such are men of initiative who do things. There are others who fear to assume any responsibility, to say "yes" or "no" to a proposition, to take an aggressive stand, or any stand at all, and always refer all matters to some other one, or to the board.

And there are boards and boards. Some will be content to delegate the actual running of the bank to the officers—where it belongs—and be content to supervise, holding the officers responsible for results and not the process by which they were obtained. There are boards that will not allow an executive to buy a bill of stationery without referring the same to them; and others who never delve into such details at all. In fact, they should not; for if an officer be fit to be an officer, he is fit to assume some responsibility. And responsibility makes executives.

THE CASHIER

Ordinarily the cashier is the "big man" of the bank, particularly in small places. He is at the bank all the time, and to him all matters are referred. He is sometimes an executive and sometimes a combination of executive and

clerk. In country places he not only signs the official documents, and directs the workings of the bank, but also acts as teller, bookkeeper and collection clerk. He may be simply a clerk with a title.

Like a good housewife, he is usually busy with many things about the bank. He takes the minutes of the board meetings, makes reports of various kinds, interviews customers, protests checks, signs drafts, passes upon loans, and is the managing force of the bank. The daily statement is his guide to the condition of the bank, and he watches two things particularly: the reserve and the loans. He is specially charged with keeping the bank within the law in its reserve requirements. He is paid to run the bank, sometimes to get new business, and to show a profit at the end of the year. Doing this, he need not worry.

Whether the management is by the president, or a vice-president, or cashier; and whether there is one vice-president or ten, matters not—the bank must be managed; and in this management is the secret of the atmosphere that surrounds it. It may be one of good will and helpfulness, broadmindedness, kindness; or it may be one of ill will, jealousy, meanness and littleness.

In "The Bankers Magazine" for June, 1914, the author expressed himself on the subject of bank management, writing under the caption, "Ink Spots on the Ledger," which was published anonymously. He here takes the credit for the authorship of the article.

THE INK SPOTS ON THE LEDGER

There is a story current in banking circles of a voucher check returned to the drawer by a Western bank, with an inkspot on it, which resulted in the resignation of several officials and ultimately the establishment of a rival institution.

Just how the blot got there, or what the wrathful and irritated depositor did to cause the upheaval, is not public property; but the fact remains, the incident caused a tempest in a teapot and the pot boiled over.

Perhaps the blot was inadvertently made, as many are, and could not be erased. Perhaps it was carelessness on the part of some clerk. It may have been due to an antiquated inkwell, full of dust and clotted ink. It may have been a scratchy pen; it may have been spite.

DON'T-CARE SPOTS

Ink spots are often "don't-care spots"; and for the don't care, there may be a reason. Take a live, energetic bank man, full of vim and vigor, willing to work his head off to get somewhere; hungry for recognition and success; anxious to please the powers that be; spending his spare time in self-improvement—take such a fellow and criticise everything he does; praise nothing he accomplishes; belittle his learning (which may be greater than his critic's); drive him in a corner and break his spirit with a bale-stick of abuse, and like the high-spirited horse that has had the bale-stick applied, he may mind you thereafter with fear and trembling, but it will be a service of fear and not loyalty.

Perhaps he has worked hard and faithfully, believing that merit would find its reward; and, believing in himself and in his job, has fitted himself for larger and better things, and knows he can rise to the occasion and make good when the opportunity arrives. It comes. With eager anticipation he awaits the outcome, only to find some favored son of some favored sire in the job he should have had, and the ink spot is one of hate.

Perhaps familiarity has bred contempt; and knowing him from a little boy up, the administration has forgotten that little boys sometimes grow up to be men. His accomplishments and his talents may be underestimated, or forgotten, or seen at too close range to get the proper perspective, and in looking for a man he is overlooked.

Perhaps some jealous mortal in the same institution has concluded that danger lies ahead of him (or her) if this aspiring youngster climbs up, and by skillful maneuvering convinces the judge and jury that it is for the best interests of the bank that no clerk shall ever get out of the underling class. In some banks, therefore, a Chinese wall, unscaled and unscalable by any in the ranks, separates the office from the force, and the ink spots on the ledgers are ink spots of despair.

Do you wonder that men do careless work when their initiative is killed, their hope gone? Do you wonder that men learn to hate, when hatred is in the air? Do you wonder that men become anarchists when the only door of hope seems through a little hole in the ground in a quiet churchyard, which cures many ills?

Do you wonder that under conditions such as are suggested above (and they do exist) the men should not care? Why should they care, when no one cares for them? Like begets like. Some men cannot be driven; most men can be won. A spirit of kindness and good-will will do more by far to generate a spirit of loyalty than all the bale-sticks in the world.

THE OPTIMIST'S "GOOD MORNING"

A certain bank in New York took on a new clerk. The president came in. "Good morning, Mr. President," said the youngster, with boldness and courage.

"No one here says 'good morning' to me, and don't you begin it," was the tart reply. The messenger quit his job, and the president should have quit his.

Not long ago there died a man of the opposite stamp. He was a member of one of the big Wall Street firms. He was on friendly terms with every man in the office. He had a cheery smile and a greeting for everyone from the porter up. And when he died they had a memorial dinner with a vacant chair, and more than one eye was moist as they remembered the man.

BOWLING ALLEYS AND CHOCOLATES

Imagine, if you can, the spirit that animates the institution whose president put in a set of bowling alleys for the boys, and bowls with them! Or the atmosphere of another where several boxes of chocolates are kept in a cupboard where the boys may help themselves (at a cent apiece), the profits going to charity. Contrast this with the institution whose executive officer (a big man in his own estimation) goes around with note-book in hand and huge specs on his nose, seeking whom he may devour. Or another where the spirit of espionage is so cruel that a false motion of a teller is likely to be taken for theft.

Ink spots on the ledgers? No, first, ink spots on the hopes and ambitions of men; then ink blots on their work.

"Cut deep enough," said Napoleon to his surgeon, "and you'll find the Emperor." Cut deep enough, Mr. Banker, and in every clerk you'll find a man. And to get the best out of him you must recognize his aim (if he has any—and

if he hasn't any, give him one) and encourage his ambition, engender hope and create an atmosphere of good-will. To the good man whose work avails naught there comes despair, deep and bitter. He may be to blame; you may be to blame. But when he concludes that good work gets him nothing, and poor work can do him no more harm, he is apt to say, "Well, what's the use?"—and this is the beginning of the ink-spot period of life, where work is a grind and life a dull, desultory thing.

For the man who is careless, there is no excuse. Gentle admonition first, then warning, then a vacant stool. But the fault as often lies without the man as within. And the man higher up is frequently so perfect in his own estimation, so infallible in his judgment, so unerring in his conclusions, and so kind withal, that to hold up a mirror and show him what sort of a chap he really is, is to invite the bale-stick, and bale-sticks break men as well as horses.

"THE FAULT, DEAR BRUTUS"

But there's another side to the question. The fault with this maker of ink spots may not lie with his superiors, but with himself, that he is an underling. He may not have seen his opportunity. He may be so close to himself that he cannot see himself. His eyes may have been on the calendar and clock instead of on his work. When pay-day takes a man by surprise, some day he'll be surprised on pay-day. Good bank men are not paid by the hour, but by the job. Perhaps our disgruntled friend has been frittering his time away dabbling in a thousand and one things outside his institution. While every man should have a wholesome hobby and be a man among men, and have an interest in all that goes to make life worth while, still his job should be the thing of his life.

He may be working on the false theory that he has a mortgage on the job ahead just because he has a life lease on the job behind. The job ahead does not always go to the man behind, for the man behind the man behind may be so much better qualified that he jumps the job ahead into the job ahead of the job ahead.

Then again he might be so puffed up over himself that to give him any more honor or responsibility would simply

burst the boiler of self-conceit. Two bank officers in New York openly boast that they know so much that they don't need books! And their very boast is the measure of the men. When a wise man gets into the company of his superiors, he keeps quiet, listens and learns—the fool talks.

Self-judgment is a bad thing. It is biased. It is unfair. Our man may have analyzed his desire to get up for ability to make good. His longing for notoriety may simply be mistaken for ambition. The despair he sometimes feels may be due to bad digestion, bad disposition, cigarettes, drink, laziness. What he needs may not be a raise, but a long walk. Not all failures are due to official misjudgment, however much the rank and file may disagree with the executives in their conclusions.

But granting that banking is full of heartaches and heart breaks, some just and others imaginary, nevertheless the man who can do good work under adverse conditions, and keep sweet and wholesome, is bound to win. If he can't do his best under the conditions that surround him, he owes it to himself to get another job. Round men never fit into square holes. But the man who can smile when it hurts, and keep sweet when others are sour, hold himself in check when others let go, and do good work when the temptation is to be careless, indifferent and cross, has in him some of the elements, at least, that make for success. Faithfulness, loyalty, efficiency and length of service count for much in banking; and while the few can sit before the roll-top and pass on loans, all can help in keeping the machine running smoothly and efficiently, doing its best work, for out of efficient service come salaries, dividends and promotions.

THE HOUSE IN WHICH IT LIVES

After obtaining a charter and electing the board of directors and selecting the officers, it follows that the next thing is to provide the bank with a home. Few banks start with a building erected especially for them or by them, it being against good banking principles to make an investment in real estate that has a limited utility so soon; it should be built from the bank's earnings, and not out of capital investment. A great many banks have, however, opened their doors in a building erected especially for their

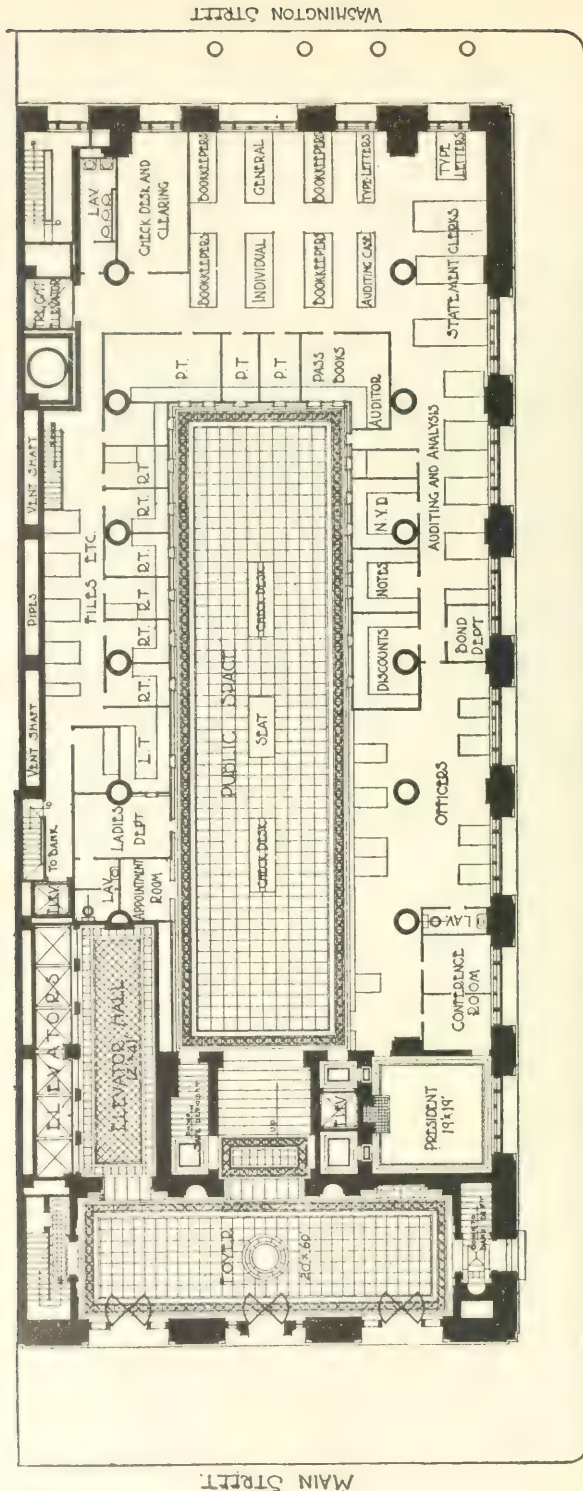
use, sometimes out of their own funds and frequently by syndicates formed in the board of directors who erect and equip the building, taking as remuneration a certain rental, usually on a sliding scale, so that as the bank grows the rental charge will grow with it.

To discuss the relative merits of different bank arrangements, the lay-out, the equipment, the vaults, etc., is quite beside the scope of the present work, there being much information on the subject to be had when the occasion requires. There are firms which now specialize in bank equipment and bank buildings, and will contract to erect the building, furnish the working fixtures even down to the ink wells, and deliver the same ready for business. There are other concerns that specialize on bank vaults and their construction. Others specialize on bank interior arrangement, viewed from the standpoint of utility, and any bank contemplating the erection of a new building will do well to consult with these firms, inasmuch as their experience is wide and their judgment good, and there are numerous little "kinks" that will help in the work of the day, and make the machinery run the more smoothly.

More and more banks are realizing the advertising value of a good outfit. It impresses the public. It looks stable. It looks prosperous. There are some large and powerful banks housed in quarters that are totally inadequate and unsuited to the dignity and standing of the bank, just as there are some wealthy men living in modest homes: but the bank is entitled to good quarters. It pays to dress well, individually and corporately. This is not to say that the bank should squander its money as some have no doubt done, but it should have the setting that is compatible with dignity.

THE BANKING ROOM

Marble and bronze are quite largely used for the counter screen and lobby fittings, and steel desks and filing cabinets are replacing wood. The object is twofold: To eliminate the risk of fire and to beautify. One large savings bank in New York has no other protection for its records than its fireproof building, erected for its own use, and keeps all books of records in steel cases, in the open room. The chances of fire are very remote, if not entirely negligible.

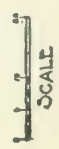


MAIN STREET

WASHINGTON STREET

SENECA STREET BANK FLOOR PLAN MARINE NATIONAL BANK BUFFALO, N.Y.

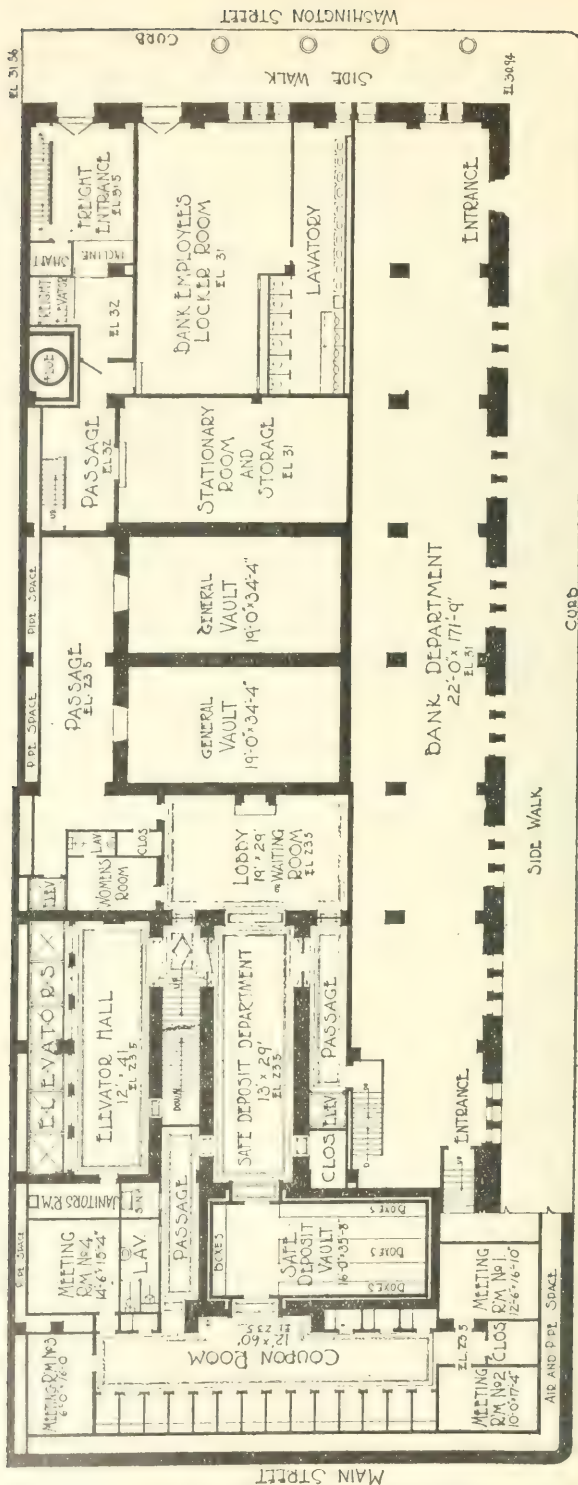
GREEN GWICKS - ARCHITECTS
BUFFALO, N.Y.



The tellers are arranged with the idea of being accessible to the public, but protected by wire cages and bronze gratings, the doors of the former being self-closing, and locked from the inside so that access can be had only by consent of the teller.

Some years ago a package of money amounting to a considerable sum disappeared from a trust company in New York. It vanished as completely as if the earth had swallowed it. The teller's cage had been locked; no one but he had been in during the day, except an officer, and where and how it got away still remains a mystery so far as the public records are concerned. It is the custom not to allow anyone back of the screen but officers and clerks whose employment takes them within the cage. It is a necessary protection to the teller. It is also a growing custom to place the officers where they are readily accessible to the public, usually separated only by a hand-rail.

It would seem that in a bank of discount with assets of two hundred million and more, the tellers would be very busy men. They are; but it is safe to say that the savings bank teller in a bank of one-eighth the size is a much busier man with the public. The reason is that banks of discount do not carry the same proportionate number of accounts as do savings banks. A savings bank with \$25,000,000 of deposits will have over 50,000 accounts; while a bank of discount of the same size may not have five thousand. Of course, the latter are all active and require much more detailed labor to handle than do the fifty thousand in the savings bank, but the work of the latter is over the counter, while the work of the bank of discount is largely through the clearing-house and the mails. Therefore, the lobby of the savings bank will be a busy place, while the lobby of the bank of discount will often be practically deserted. To prove this, go into any goodly sized savings bank on Monday—the busy day of the week. You will find long lines, mostly women. Go into a bank of discount of the same size, and you will find perhaps half a dozen men, or boys, messengers of business houses, etc., delivering stocks and bonds, obtaining certifications, making collections, deposits and various other errands. This statement does not apply, however, to banks doing a large commercial business, or those operating savings departments, where the crowd is really a



BASIMENT PLAN MARINE NATIONAL BANK BUFFALO, N.Y.

GREEN & WICKS ARCHITECTS
BUFFALO, N.Y.



PLAN OF BASEMENT IN A MODERN BANK

savings bank crowd and not commercial depositors; nor to the large "commercial banks." The foregoing remarks are particularly true of large city banks, which deal mostly with large concerns and have a few active and large accounts, rather than a host of small ones. There are, of course, banks of discount which have a large number of small depositors, because of their situation in retail districts, which makes an active counter trade. But the teller of the bank of discount has much greater responsibilities than does the teller of a savings bank, for as will be shown in the chapter on that subject, his work is involved with much banking law. He must pass judgment on many matters that are peculiar to his position. He must take risks that the savings bank teller never assumes. He handles more checks in a day than the savings bank man does in a month; and in the handling of checks there is always risk.

The lobby is, therefore, arranged according to the needs of the bank. Some would want a large space, especially if they ever expected to run a "Christmas club," which would bring thousands of depositors to the bank every week; a smaller one if their business was largely through the mail and clearing-house.

Many New York banks have the bookkeeping staff away from the main room, sometimes on an upper floor, with direct communication by means of telephone, telautograph, elevator, tube, etc.

This is done on account of the space saved for the lobby, officers and tellers, as well as to reduce the rental for expensive ground floor space, and also to avoid the confusion that follows the click of many adding machines and typewriters. But whatever the arrangement there must be quick and silent communication between the bookkeepers and tellers, so that depositors' balances may be verified without acquainting the customers with the fact that the account is being looked up.

Special attention, and properly so, is given to vault equipment, it being not only the bank's strong box, but also its show place and frequently its silent partner, when boxes are rented out.

VAULTS

A whole book might be written about vaults and their construction, and to trace the evolution from the wooden

chest with a few iron bands, and two or three padlocks, to the massive modern vault, with walls two feet thick consisting of layers of steel bolted together, a filling of concrete, in which steel rails are embedded, doors three feet thick, inner chests, steam jets so arranged as to fill the space with live steam in a few moments, and in which no man could live, electric wires connecting with the outer world, and so arranged that to bore a hole as big as a silver quarter would bring the police, would be interesting reading, and for such information the reader is referred to works on the subject of vaults and safe-deposit operations. Suffice it to say here that modern vault making is an art, and as the science has progressed, burglary methods have improved, so that good vault equipment is a proper investment and brings its ample return.

The custom now is to build money vaults within easy access of the tellers, and record vaults within easy access of the bookkeepers, and storage vaults for the storage of records and papers in some cellar or sub-cellar, where space is not so valuable.

An important and quite necessary official in the bank is the guard. He stands in the lobby and directs customers where to go for the service they need. He answers questions. He can be a mighty force in making the customers feel at home. He is sometimes a special officer, and in case of any attempt at fraud would be empowered to make an arrest.

Some men have the faculty of being polite yet not officious; serving and yet not appear to serve; humble yet dignified; useful yet not important; out of the way yet in the way when wanted. There is one such in New York, in a bond house—a colored man. He will inquire your business, take your hat and coat, ask you to have a seat, hand you a paper, take your message, carry your card; usher you into the place you want to go with the grace of a Beau Brummel, and yet do it so smoothly, so unofficially, so acceptably withal, that you immediately feel that here is a real gentleman, and here a good firm; and you like to come back.

There is "Philip" of the First National Bank of Boston. He is so admirably described and so delightfully pictured by a depositor in that institution, that I have considered it a classic and worthy of perpetuation.

PHILIP—AN INSTITUTION

(An Appreciation by a Depositor)

WHENEVER I enter or leave the First National Bank of Boston I am sure to receive a courteous greeting and smile from Philip. Philip is the gentleman of color who officiates upon the main floor, answers questions, and directs strangers to their proper anchorage.

He wears, in addition to his smile, a smart uniform of blue with white gloves, and West Point itself, even upon a field day, does not boast of a more soldier-like personage.

Any bank can take and safeguard your money, and even pay it out to you again on demand. Any bank can, upon the presentation of proper collateral, make you a loan, and there are many other conveniences and courtesies which can be extended; but there is only *one* bank, to my knowledge, that possesses a Philip. "Philips," like poets, are born and not made, and so there will never, even during bumper crop seasons, be many of them. Philip has that rare quality of not knowing or appearing to know what manner of man or woman you are. To Philip every person entering or leaving this (I came near saying *his*) bank is a potentate and deserving of all the courtesy and attention supposedly due a potentate.

It makes no difference to him whether my clothes are ready-made and old or the latest creation of a master, whether I am about to deposit millions or seek a small loan—I am a visitor and a customer, and am, therefore, entitled to instant recognition and courtesy or, if I require it, attention and help.

In a bank, capital and surplus are necessary; officers with brains and business acumen are necessary; conveniences and assistance are a part of the service you expect; clerks and tellers must naturally be in attendance. But besides and beyond all these there is something more to be desired, and Philip supplies it. Cold winds may blow or summer's sun beat down, rains may descend and floods come, but the cheerful smile and inherent good nature of Philip are undisturbed. Like the brook, they go on forever. Most of us are very human, and we may, at times, be scant with our courtesy, yet kindness on the part of others we never fail to observe and appreciate. The little things of life are important. A particle of grit may not wreck the machinery of a great establishment, but it disturbs smoothness, and makes the cylinders knock. A lubricant is a fine thing to have handy when the gears grind. Philip helps supply the "grease." He makes things run easier, he saves "horse-power," he helps us to the best of his ability to conserve our energy. What the world needs is more kindness; what the individual needs is more patience; and what banks need is a Philip, for he is more than a faithful watchman, more than an efficient servant—he is an *institution*.

CHAPTER V.

DEPOSITS AND THE RECEIVING TELLER

It was said in a former chapter that one of the functions of a bank is to receive deposits. A bank with the average capitalization would prove a poor investment for the stockholders and a poor asset to the community if it had only its own capital with which to work, for the income from the capital investment would barely pay expenses. It, therefore, invites deposits, it seeks deposits, it pays for deposits and sometimes buys deposits. In fact, some banks pay too much for deposits (allow too much interest or on too liberal terms), compete with other banks by unsafe methods, and so come to grief.

Bank profits come largely from loans and investments, and in order to lend money the bank must have money. If it has, as we have seen before, a dollar in gold, it can lend four dollars in credit. It can receive interest on four dollars and only pay interest on one. Some bank men fail to grasp this fact, in theory, although they practice it. Most banks have more deposits than capital. The deposits earn dividends for the capital, and it is good banking to attract all the deposits possible and pay as little for them as is necessary.

NEW YORK THE DEPOSIT CENTER

By virtue of the fact that New York is the commercial and money center of the country, and particularly by reason of the fact that there is always a demand for money to "carry" Stock Exchange loans—meaning that money can be loaned on demand or call in New York at any time at a price, sometimes high and sometimes low, but always at some rate; and by reason of its being a Central Reserve City under the National Banking Act, money from all parts of the country finds its way to New York from out-of-town banks when there is no use for funds in the country districts. These deposits of country banks constitute their reserves. The interest on these reserve balances varies, but is usually around two per cent.; and when money is un-

employed in other parts of the country, it is sent to New York, either for loaning out for the bank's account, or deposited with the city bank on interest according to agreement.

THE COMPETITION FOR BANK DEPOSITS KEEN

The competition for these balances is extremely keen, banks operating departments whose sole duty is to solicit such accounts. Recently it was announced that a prominent New York bank would be absorbed. Within a few days another bank had fifteen men out in various parts of the country soliciting the accounts that the first-mentioned bank was carrying, it being possible for one bank to know approximately who the depositors of the other banks are by keeping record of checks that pass through its hands. Some banks make this a settled policy. And by all manner of means such as convention attendance, advertising, service of various sorts, personal acquaintance, corporate connection, etc., deposits are sought, and secured, sometimes under duress.

In soliciting a country bank's account, particular stress is laid upon the facilities of the city correspondent to serve the country bank, especially in the line of furnishing credit information. It will supply data regarding borrowers, buy paper for its correspondents, care for securities, make loans, collect checks on agreed terms, and render all manner of little services in return for the balance, and sometimes agree to send the bank a certain amount of business, such as collection of notes, drafts, checks, etc., in a certain district, that will be a distinct profit. It is a case of one serving the other and the results to the city bank are shown in the total deposits.

DEPOSITORS POSSIBLE BORROWERS

It is an axiom of banking that a good borrower is as much, if not more, benefit than a good depositor. And much importance attaches to the customer being a probable borrower. In fact, the bank wants him to borrow; it is profitable to both that he should. And since his borrowing is part of the deposit plan, it must be ascertained, in the

first instance, that he is a desirable customer before he is allowed to open an account and on the strength thereof become a borrower.

OPENING AN ACCOUNT

Everyone who approaches the teller of a bank of discount and expresses a desire to open an account is not received; first, for the reason that the bank may have rules as to the minimum balance. Thus, in one large bank in New York the rule is that a balance of at least \$5,000 must be kept or they do not want the account. Other banks are not so harsh in their rules, but will generally request that a minimum balance be maintained, and this is understood when the account is opened. It may run from \$50 in a country bank to from \$300 to \$500 in city banks; but the bank desires that it shall be able to make a profit on the account, and by the process of analysis that will be explained in the chapter on analysis and cost accounting, it has been determined that an account that does not show a certain balance is a loss to the bank, for to it must be charged, theoretically, the proportionate cost of managing the bank, rent, heat, collection costs, etc., and to it credited the interest on the money available for investment. And for the privilege of drawing checks and having the bank collect the checks deposited, the bank is by all the rules of equity entitled to a profit.

While the applicant's pedigree is not inquired into as closely in a bank of discount as in a savings bank, a proper identification is essential. The applicant may be introduced by another depositor, or someone known to the bank's officials, but no conservative bank will open an account with those who do not come properly introduced.

A card of introduction is often necessary and always desirable, for banks are, as a rule, not given to opening accounts with strangers. So many frauds have been practiced upon banks by those who have, with or without introduction, opened accounts and then used the medium thus afforded to work a fraud and bring loss to the bank, that banks in large cities, especially, now require introduction before laying themselves liable to frauds possible in banking with strangers.

Signatures are taken on as many cards as the bank has departments wherein the signature will be verified. The officers may have one card, the tellers another and the book-keeping department another. In the case of corporations

GETS \$3,400 ON \$34 CHECK.

Brooklyn Police Seek Man Who Raised Watchman's Pay Draft.

A forger who raised a pay check issued by the Ocean Parkway Building Company from \$34 to \$3,400 and collected the money is sought by the Brooklyn police.

The check, payable to a night watchman employed by the company, was lost in the street. The finder added two ciphers, opened an account with a local trust company, and later deposited the raised check.

On Saturday last the forger drew out the entire "deposit." The police say that they have a clue to the man and expect to arrest him.

THE REASON BANKS ARE LOTH TO OPEN ACCOUNTS WITH STRANGERS, AND INCIDENTALLY TO SHOW THE RISKS OF BANKING. THE BANK CAN ONLY CHARGE THE MAKER THE ORIGINAL AMOUNT.—
FROM NEW YORK TIMES, DEC. 16, 1914.

and banks, all the officers who are authorized to sign will affix their signatures to the cards, and the bank will sometimes ask for a copy of the by-laws which give the corporation's rules as to the signing of checks, together with a statement showing who the officers are and when elected and for what term, this statement being certified to by the secretary or officer other than the ones empowered to sign. After taking signature, business address, etc., a pass-book is made out, check-book furnished and account opened on the ledger.

THE BANK AND ITS DEPOSITORS

Right here it may be well to stop for a time to consider the relation that exists as soon as the bank has thus opened account with a depositor. It is a settled principle of law that the relation between a bank and its depositors is that of debtor and creditor; meaning to say, the bank by accepting the account and the money and negotiable instruments that will be deposited from time to time, becomes the legal owner of the same, and simply agrees to repay the amount upon demand.

So many people have the idea that the bank is custodian—bailee—of the funds. They speak of having so much money in the bank, forgetting that they have nothing in the bank, but do have a credit on its books, and what they hold is an "account payable" of the bank. The bank in law and practice agrees to pay the sum on deposit to the parties and in the amounts ordered by the depositor, and he has the right to recall his orders to pay at any time prior to the actual payment; i. e., to "stop payment" on his checks, and this is frequently done.

THE PASS-BOOK

The depositor's pass-book is his evidence of the deposit. In it are entered the deposits and sometimes the payments. In order that the bank may not be held liable for deposits entered as cash, which are in reality merely collection items, and to have it distinctly understood that all checks are received subject to collection, and only become cash when collected, many banks now have a statement in their books to the effect that "Checks and drafts are received and credited subject to the following agreement: This bank assumes no responsibility for the collection of checks, and reserves the right to withhold payment on checks drawn against uncollected funds, and reserves the right to charge back any checks not paid, or the remittances for them that are not received. The bank also reserves the right in its discretion to send items to the drawee bank direct for payment, and when so sent the above conditions are still assented to."

Another form reads: "This bank in receiving out-of-town checks and other collections acts only as agent of the depositor, and does not assume any responsibility beyond due diligence, and the same care it uses in collecting its own paper."

Still another form has it as follows: "This bank receives collections and deposits only on the following conditions, to wit: This bank shall be bound to use no more than ordinary diligence in endeavoring to make collection of any item left with it for collection or by it passed to the credit of any customer. It shall not be liable for the neglect or failure of the channels or parties to or through which such item has to be sent: nor shall it be liable for the returns received thereon until such returns have been cashed. And in case of loss on any item for failure to collect or failure of returns, this bank

shall be entitled to charge such loss back to its customer or to collect the same from the customer at once."

It frequently happens that a bank will accept a check on deposit on an out-of-town institution, and collection is,

NOTICE

This book is to be used only
for the entry of deposits.

A statement of the account and cancelled vouchers will be returned to each depositor on or about the first of every month.

In collecting out of town items this
Company assumes no responsibility be-
yond the exercise of due diligence.

Please notify us immediately of any
change in your address.

Guaranty Trust Company
of New York

NOTICE OF TERMS ON WHICH DEPOSITS ARE RECEIVED PRINTED IN THE PASS BOOK

therefore, necessary through the mails, and before returns come in the collecting bank fails. The instrument may be correct in every respect, and no question as to its goodness arises; the loss is due to the collecting agent. It would seem proper that the bank should charge the check back to its depositor; but where no definite agreement is made as to the liability assumed in such matters, in some jurisdictions it is

held that the bank is sort of a sub-agent in the matter and not agent. And in such a case, where the bank fails to make the collection through the fault of its correspondent, it is held liable. In other States it is held that in receiving an out-of-town check on deposit and for collection, the bank is agent for the depositor and the correspondent banks are its sub-agents, and if any of these fail before remittance is received, the loss is the depositor's and not the bank's provided it has used reasonable diligence and care in selecting its correspondents.

The latter view would seem to be the most reasonable and fair. Depositors must know that a bank cannot guarantee the collection of checks deposited. It must collect the same through the usual channels and depositors are bound to know the course of such transactions. And if the bank uses care and judgment in sending the check for payment, no liability should attach if the chain breaks before the funds are in hand.

Banks should in all cases have it plainly stated on their pass-books and deposit slips that they assume no liability until funds are received; but that the bank's position may be clear, notice to depositors should be given, as above noted.

THE RECEIVING TELLER

The individual with whom the depositor comes into contact most frequently is the receiving teller. While most of the checks that are drawn by depositors are paid through the clearing-house or through the mails, the deposits, as a rule, all go through the receiving teller's window, except it may be those made by mail, and these are not in great number if we omit those remittances in the nature of deposits, but which are rather collection items, that come from correspondents, and which go through a separate department in the large banks. These, of course, are an important part of the bank's work, and constitute a very large portion of the liabilities in many cases, but they are not over-the-counter deposits such as we now have in mind. In smaller banks, however, the mail deposits go through the teller's cash.

While the officers meet the borrowers from time to time the teller is apt to meet all patrons, sooner or later, and can do much to make his bank popular with its clients. Here

courtesy is a real asset. It will not do to watch the clock too closely, for the day's work cannot be measured by the hour. While a bank should close as promptly as it opens, and should not encourage its depositors in the habit of coming at

NEW ACCOUNT TELLERS' RECORD CARD.

INTRODUCED OR SENT IN BY		1	2	3	4	5	CALLED ON, OR "PHONED" TO	SENT FORM LETTER NO.	SENT SPECIAL LETTER
Howard Brown (old depositor)									
ADDRESS 516 Trust Bldg								#3.	
REMARKS			✓						
									✓

	DATE	NEW DEPOSITOR AND ADDRESS	SENT IN	INTRO- DUCED	KIND OF ACCT AND AM'T	CALLED ON OR "PHONED" TO	SENT FORM LETTER NO.	SENT SPECIAL LETTER
1	5/15/13	John A. Richardson 6515 So Maple Ave. City		✓	Cheq \$250		#1	
2	5/26/13	Mrs Robt. Hanson 1017 No Broadway	✓		Cheq \$60		#2	
3	5/31/13	Kenneth Marshall c/o G. H. Smith Co City	✓		Cheq \$300.		#1	
4								
5								

A CARD FOR KEEPING RECORD OF BUSINESS SECURED THROUGH FRIENDS OF THE BANK

any time of the day and expect to find it open, there should be reasonable allowance for delays incident to business, and if the window has to be opened for a late comer, do it with a smile.

THE TELLER AN IMPORTANT PERSONAGE

It is apparent that the receiving teller is important in the rôle he plays. He meets the customers. It is his concern to treat them right; to be pleasant, yet avoid conversation. He must bind the customer to the bank by the quality of his service as he binds the bank in the acts he performs constantly. Let him, therefore, be careful. And it is to remark here that the teller should so conduct himself as to make a good impression. He should not dress gaudily, wear much jewelry, or use tobacco in business hours. He should,

most of all keep clean hands. In making deposits, the customer is very apt to watch the receiving teller closely, and if he is unkempt, it is quickly noticeable, and neatness is an asset for its own sake. And remember, that it is not necessary to wear a diamond to carry prestige. A smile will do as well and costs less.

The receiving teller is sort of an educational medium. To him falls the duty of instructing his depositors in the proper method of making out tickets, endorsing checks, sorting money, etc., and with the coöperation of the depositors, much of the annoyance of badly prepared deposits may be avoided.

THE WORK OF THE RECEIVING TELLER

The work of the receiving teller resolves itself into two main functions: (a) To prove the deposit ticket and receipt for items so received; and (b) to sort the checks and currency into groups before turning over to other departments. He is accountable for all funds received by him until they are surrendered. The cash which he takes in is delivered to the paying teller, or to some officer who has charge of the cash. The checks on banks in town go to the clearing-house department; other items on local banks to the collection department; the out-of-town items to the transit department. And thus, he receives his deposits, makes his own records and distributes the items all over the bank, and his day ends as it began without cash in his drawer.

In a small bank the receiving teller after receipting for the amounts in the customers' pass-books, sorts the items into city and foreign, and all city items that go through the clearing-house are listed for the clearing. Other items requiring presentation by runner are given to the department that has charge of collections. Items out of town are sent to correspondent banks.

The teller must be particular about many things: (a) That his money is correct in count. The bank is responsible for whatever he receipts for to the depositor. A receiving teller at one time in a rush could not handle the crowd and took a deposit and laid it aside to prove later, giving the depositor credit on the book. He found the cash \$100 short and so notified the depositor, who insisted that the count was

correct and claimed the deposit as entered—and got it. (b) That his money is genuine. If counterfeits creep in, and he cannot trace where they came from, the bank must, of course, lose. (c) That checks are not dated ahead, and are indorsed; for while these errors might not result in loss, they require adjusting with the depositor and cause annoyance. Checks are often dated ahead, or dates are obscure or omitted. Often they lack previous indorsement or they are indorsed by an attorney without adequate proof of his authority. The sum in the body of the check may not correspond with the figures or may be entirely missing.

In banking transactions, especially in Wall Street loans, it frequently becomes important to know the exact time a deposit was received, particularly in bankruptcy proceedings. A time stamp is often used to indicate the exact time a deposit was received or a check paid, the stamp changing every minute.

GOOD MONEY AND BAD

It is a first requisite of a receiving teller to be able to distinguish good money from bad; or rather bad money from good; and by an instinct that comes from long handling of money learn to know bogus money by touch. It is a peculiar fact and apropos to the subject to say that the author in an experience covering twenty years in banking never had the pleasure (?) of throwing out a counterfeit bill. It may have been due to his ignorance of bad money, or it may have been due to the honesty of the patrons of the banks in question, yet the fact remains that in three institutions under his observation for that length of time, no counterfeits were detected.

To become an efficient teller, take your counterfeit detector and study page by page by comparison with genuine notes. Take a strong magnifying glass and examine the good bills; then, locate the defects on the counterfeits. Go from one denomination to another until the looks of the genuine bills and the weak spots of counterfeits are engraved on your memory. Then you know where to look for the vulnerable spots whenever you handle money, and will have no need to scrutinize the bills as a whole. Another good practice is to cut out all newspaper items or telegrams relating to

bad money and how banks are duped. Paste these in a convenient place and read them occasionally. Experts do not judge so much by the appearance of a note as they do by its feeling, that is, by the way it slips through the fingers; but it takes years of experience to acquire the necessary firm touch, and even then it is not always reliable.

When notes are received that are counterfeit it is the duty of the receiving teller to return them to the depositor at once. The National Bank Act requires national banks to stamp or write in plain letters the words "counterfeit," "altered" or "worthless" on all fraudulent notes that come into their possession. There is sometimes a delicate duty to perform, when the teller has to say to a depositor who has presented a note that is fraudulent that he must stamp and return it to him. Of course the object of so doing is to stop its circulation. And this is naturally unpleasant to the customer—but that is the law. In many cases the receiving teller is not so sure that the note is a counterfeit, and should he make a mistake, the bank would be liable for the amount. The error can be remedied easily by sending the note for redemption stating the fact, and getting a new one from the Government, so that the danger of loss to a bank ought not to deter a teller from performing this clearly defined duty. In cities where there are sub-treasuries it is the general custom to refer all doubtful money to them to pass upon.

In receiving coin, and especially gold, one is inclined to be deceived by its weight. On the Pacific Coast, where it is in more general use than in the East, as the loss from abrasion is inevitable, the law would be unjust if every coin falling below the standard weight was declared uncurrent. On the contrary, it expressly provides for the redemption of coins in weight within certain limits, as follows: "Any gold coins of the United States, if reduced in weight by natural abrasion, not more than one-half of one per cent. below the standard weight prescribed by law, after a circulation of twenty years, as shown by the date of coinage, and at a ratable proportion for any period less than twenty years, shall be received at their nominal value by the United States Treasury and its officers, under such regulations as the Secretary of the Treasury may prescribe, for the protection of the Government against fraudulent abrasion or other practices. * * * Any gold coin in the Treasury of the United

States when reduced in weight by natural abrasion more than one-half of one per cent. below the standard weight prescribed by law, shall be recoinced." Coins twenty years of age may, therefore, be one-half of one per cent. below the standard weight and still be current. A coin of light weight, unlike a counterfeit note, cannot be stamped "light weight" or with any words to indicate its imperfect character. There is no law permitting anyone to so mark a coin. There is a provision, however, which directs that "every person who fraudulently, by any act, way or means, defaces, imitates, impairs, diminishes, falsifies, scales or lightens the gold and silver coins which have been, or which may hereafter be, coined at the mints of the United States, or any foreign gold or silver coin which is by law made current or in actual circulation as money within the United States, shall be imprisoned not more than two years and fined not more than \$2,000."¹

MAKING A DEPOSIT

The first thing that is required of a depositor in making a deposit is to make out a deposit slip. This is an original entry in the eyes of the law and an important document. It is the bank's record of what the depositor offers for deposit.

The original tickets, after the receiving teller has finished with them, are passed to the bookkeeper and then filed. They often become exceedingly valuable for reference in case differences and misunderstandings occur as to credit dealings with depositors. All deposits received by mail must have prompt acknowledgment. All errors and discrepancies, if not discovered at the time of deposit, must be immediately advised by telephone, if possible, in the case of city customers, and otherwise by letter.

The deposit items are separated into bills, gold, silver and checks, some banks requiring out-of-town checks to be listed separately from the local items, in order that the exchange charges may be ascertained.

In presenting a deposit the depositor should use care that all bills are right side up, denominations separate, the large bills first, and checks all properly indorsed, on the left hand end as the check is turned over. Silver should be

¹Horace F. Fuller, Receiving Teller, Second National Bank, Boston, before Boston Chapter.

wrapped in standard packages, in wrappers which the bank will furnish. The depositor's initials should be written on the rolls of silver so that in case discrepancies are found they may be corrected. Bills in quantities should be put into standard packages. It is customary to strap bills in units of fifty bills in each package; thus, fifty ones and twos (sometimes thirty ones and ten twos); fifty fives, making a package of \$250; fifty tens, making \$500; and fifty twenties, making \$1,000. Small change is wrapped as follows: Pennies, 25 cents to a roll; nickels, \$2; dimes, \$5; quarters, \$10; halves, \$10. Gold is placed in bags of usually \$1,000 each, and strongly tied. Silver dollars are, as a rule, placed in bags of \$100 each. Customers should follow the bank's methods in this. Some banks in strapping in the receiving cage put up odd amounts for payroll purposes, as, for instance, \$125, \$150, \$175, etc., in fives or fives and tens. Also even hundreds are put up in fives and tens for quick use without counting when they are paid out.

Coupons offered for deposit should be placed in coupon envelopes with the name of the depositor, the name of the company, the due date, the number and denomination, where payable, and total. Little attention is paid by the teller to the signature on checks, except checks drawn on his own bank, it being more important that the check be properly indorsed. He cannot know the genuineness of the signature on checks drawn on other banks, but can know the last indorsement. The first indorsement should be the same as on the face.

Where there is any doubt regarding the instrument, particularly as to its regularity and the probability of its being paid, it should be received for collection and not entered as a deposit. It may be "short extended," i. e., entered in the inside column, with memorandum that it is for collection.

THE DEPOSITOR SHOULD MAKE THE TICKET

The reason banks require customers to make out their own tickets is to have first-hand evidence of the original transaction. A customer might claim to have deposited a certain amount, or a certain check, but when confronted with the deposit ticket in his own writing further proof is not likely to be required.

Two cases will illustrate why the depositor should make his own ticket. A doctor went into a bank and offered for deposit a single bill, claimed to have been \$1,000. The clerk, who had never seen a bill of that denomination, evidently mistook it for a \$100 bill, made out a ticket, and gave the doctor credit accordingly. Without looking at his pass-book, the doctor began to check against the account and soon found that he had overdrawn the amount. Upon receipt of overdraft notice he explained the transaction and claimed credit for the additional \$900.

The deposit slip being in the clerk's handwriting, and the pass-book calling for a like amount, the bank insisted that the doctor was mistaken, inasmuch as its cash balanced on that day. Suit was subsequently brought and only because the doctor could prove he received the bill, and traced it from the time he received it to the bank counter, did he win his case. Had he made his own ticket, the error would not have happened.

In another case a woman intended to send \$200 for deposit by her daughter. Having an extra \$20, she decided to make it \$220, but said nothing to the daughter. The latter handed it in as \$200; the teller received it as \$200, and where the \$20 went is still a mystery. The woman had no other proof than her word, and the teller was sure it was but \$200 when he counted it. It was embarrassing on both sides.

When the receiving teller has counted the money, proven the checks, etc., the amount is entered in the pass-book. As the checks are verified by the receiving teller, a mark is made alongside the item to designate its class, as, for instance, "N. Y.," means a New York item, "34" a check on Bank No. 34 in the clearing-house, etc. This custom, of course, varies with the banks.

When a customer representing a branch house makes a deposit, a duplicate ticket is often presented to be stamped by the receiving teller, this stamp giving the date and the name of the bank. This is sometimes forwarded by the bank to the customer's head office. Care should be taken in making entries, as these are sometimes very important if any complications should arise.

CHECKS FOR DEPOSIT—INDORSEMENTS

The items offered for deposit will be: Checks upon banks in the same city and clearing through the clearing-house or collectible by messenger within the next business day; checks on out-of-town banks; coupons, requiring special care and registry in the mails, notes falling due, and other instruments, such as drafts upon merchants, drafts with bills of lading attached, etc. The latter are, of course, segregated and not credited, but entered for collection, either by the teller or by the collection clerk. The busy teller has no time to verify indorsements other than the last. At times when checks are rapidly received for deposit it is impossible to examine them carefully; hence the greater need of looking at the indorsement of a depositor. When checks are finally paid by the drawee institution, errors are sure to be detected, and, of course, the bank receiving them ought always to know from what source they came, in order to ascertain what to do. Checks should be endorsed exactly as they are drawn. If a check is drawn to the order of "William B. Smith," it should be endorsed that way and not "W. B. Smith." If the name is wrong or wrongly spelled, then indorse as on the face of the check with the correct name underneath. If a check is endorsed by one person for another under power of attorney, it should be endorsed by the principal as by the attorney, and the power lodged as evidence of that authority.

It is permissible and often obtains, that a bank will receive a check improperly drawn or endorsed to be passed to the credit of the depositor. If it goes to the credit of the depositor it can only be drawn by check, properly signed, and so the bank is protected in accepting an irregular indorsement only if the check is for credit to the account of the depositor. Checks irregularly indorsed should never be cashed, nor is it fair to the drawee bank to pass such checks on without calling attention to the irregularity, so that the matter will not be overlooked when it reaches the place of payment.

CORPORATION CHECKS

In dealing with corporations, the receiving teller should be careful to see that all checks are endorsed by the corpora-

tion and not by an officer as such. A proper indorsement is "The Century Company, by James Smith, Treas.," and not simply "James Smith, Treas." And a receiving teller should never accept corporation checks for credit to personal account. Suppose the above-named treasurer is empowered to endorse checks, and to draw checks. He comes in with a check drawn by himself, as treasurer, to his own order and offers the same for deposit. It should be refused. The bank has notice on its face that the treasurer is using if not misusing the funds of the company for his personal affairs. If the check were signed by two other officers the case would be different. For this reason certain well-managed bond houses will not accept in payment for bonds purchased through them the checks of bank officers signed by themselves, but request their personal check. It can, therefore, never be charged with knowingly accepting bank funds for securities sold to bank officers.

It has been held that a bank is liable for accepting checks drawn by corporation officers to their own order, in such a way as to carry notice of irregularities on their face. Such checks are often drawn innocently and in good faith; but if the matter is diplomatically explained to the depositor he will understand. The safe way in dealing with corporation officers is to explain the rule at the beginning, so that no trouble will arise on this score. Checks to the order of corporation officers should always be signed by one other than the officer interested and offering the same for deposit as a matter of sound banking policy. Checks drawn by one acting in a representative capacity and drawn to the person's order as an individual, should never be accepted without careful inquiry as to the right of the one so drawing to draw to his own order. Thus, an executor or administrator of an estate might draw to his order as an individual for expenses or other charges, and it might be perfectly proper; but the check has notice on its face that it is trust funds going to an interested party and should be verified by requiring court sanction to the transaction.

It has been held that if a check is offered for deposit in the same bank as drawn on, and credit given, the credit cannot be rescinded, as the teller has means of knowing if the check be good or not. Therefore, the teller should be wary as to how he credits checks drawn on his own bank.

THIRD PARTY INDORSEMENTS

Third party endorsements are a source of never-ending annoyance, except, of course, when received from depositors of long standing and known reliability. For the benefit of those who may not understand, I will explain that a third party endorsement is another endorsement on a check beside the depositor's. If a check is drawn to the order of a depositor, it may be received on deposit and placed to his credit without endorsement of the payee without the slightest danger of any question being raised as to the endorsement which the bank cannot face with impunity. The books will show that he got credit for it, and that he received the proceeds. But when the check is drawn to another or third party there is, first, the danger of forging; then there is diversion of funds, which means that the check was intended for one purpose and used for another. Then if the payee of the check is a corporation or trade name, there comes in the question of power to endorse on the part of the party who actually wrote the endorsement.

Again, to make myself clear, I will say that power to sign and endorse for a corporation can only be given by the board of directors of that corporation. To be sure that an endorsement of a corporation is correct, it is necessary to have a copy of the resolutions of the board giving power to a particular officer, we will say treasurer, and a copy of the minutes of the meeting of the board, showing the individual elected to such office. These copies must be certified to under seal by one of the officers, usually the secretary. Where a check is drawn to the order of a trade name company, a certificate is necessary, certified by the county clerk, as a correct copy of the original on file in his office, showing that certain persons are doing business under that name. When a check is drawn to the order of a person deceased and endorsed by the executor, it is necessary that a surrogate's certificate should be had, showing who was named or appointed as executor or administrator of the estate. If the check is drawn to the order of a person and endorsed by another for him it is necessary to have a power of attorney. If it is drawn to a corporation and endorsed by the treasurer and placed in his own account there may be diversion of funds in which the bank may be involved. I am citing all

of the above as necessary in third party endorsements, if there should be a dispute over the endorsement in the future. Of course, in the case of a reliable depositor who is solvent when the check is returned, the bank simply demands the funds from him or charges his account.

But some depositors are here to-day and there to-morrow. If the depositor cannot be found or is insolvent the bank cannot charge his account. Then if a dispute arises the bank must have the papers mentioned above, to support its contention that the endorsements are good. This, of course, is supposing that there is no forgery involved, in which case no papers can save the bank.²

THE RIGHT NAME SHOULD BE ON THE TICKET

It is important that the deposit ticket and the bank book which accompanies it shall be in the same name; for if the ticket and book are not in agreement, the ledger account and bank book will not tally. This is especially true where there is more than one depositor of the same name, as frequently obtains in the city banks. It is not unusual to find banks with two or three accounts bearing the same name, and to distinguish one from another numbers are sometimes given; and these should always appear on the ticket, so that the bookkeeper will not post to the wrong account.

Not only would an error of this sort lead to trouble and confusion, but it might result in lawsuit and loss to the bank. For instance, suppose a deposit is wrongly credited, and the account to which it should have gone becomes overdrawn and the bank refuses payment on a check which would be good had the credit been properly made. In a case of unwarranted protest, the bank would be liable in damages if protest followed where the account was good for the amount. A case was recently tried in the New York courts where it was sought to hold a bank liable for the amount of a deposit wrongly credited to a depositor of a similar name, the one to whose account the entry was wrongly made seeking to hold the bank for the amount, on the ground that it had made similar mistakes before and this was quite likely a blunder on its part for which it should suffer. The claimant for the wrongly-credited deposit lost.

²N. D. Alling, Assistant Cashier, Irving National Bank, New York, before New York Chapter.

In cases of wrongful credit it is sometimes difficult to make a correction, especially with an unscrupulous depositor, who, for the sake of the amount involved, would not despise perjury. If the teller will verify the name on the slip and that on the book such errors will be avoided. Of course, should the error be due to the depositor's neglect, another situation would arise; and it is entirely possible that concerns having several bank accounts, or several concerns working under one management, might get the pass-books mixed and present the wrong ticket with a book and thus be responsible for the error. Therefore, the name of the depositor should be on the inside of the book as well as outside, and the teller should see that it agrees with the ticket.

Deposits are often made without the book, a practice that should not be encouraged, but is permitted because there seems to be no way of avoiding it. But subsequent entries should not be made until the book has been to the bookkeeper and verified with the ledger and if possible the deposit slip. Bookkeepers usually make such entries.

It is the rule in many banks that only cash or its equivalent may be immediately credited to a depositor's account and he allowed to check against it, especially where the average balance is not large and the depositor is working on a small margin. If, however, the depositor maintains a generous balance, of course all items can go into the credit. But cash, exchanges for the clearing-house, which include all checks on banks in the same place which will be paid within the next business day, may be entered as cash.

PROVING THE TICKET

It is usual for the teller to check the items as he proves them, for only by so doing can he ascertain that all are in hand. It is often the case that silver is carried in the depositor's pocket, and if not asked for is likely at times to be forgotten, and checking is the only way by which to overcome the tendency to forget.

It is a very good rule for the teller to have a stated method of verifying the deposit slip. He should first take the bills, then the silver, then the checks. If he follows this arrangement, he will be sure to get the money, the hardest thing to prove he did not get if any dispute should arise.

It is possible that a crafty clerk would devise a scheme to trap the unwary teller by withholding part of the deposit, and if not noticed pocket the funds. It is an easy matter to hold back a ten-dollar gold piece or a roll of silver, but if the items are checked in the order they appear on the slip such things are not likely to happen. And if a clerk were to successfully operate such a trick, he might easily explain that the money had been overlooked.

One of the duties of the receiving teller is to collect the exchange charges, or deduct the same from the deposit. Some banks keep these records and make the charge at the end of a month, or half yearly, but the calculations are usually made in the receiving teller's department. The teller should be familiar with these charges.

From the receiving teller the checks and other items go to the proper departments; cash to the paying teller; collections to the collection department; transit items to the transit department; foreign items to the foreign department; coupons to the bond and coupon or collection department. The credit instruments may merely be sorted into checks on the depositary bank; checks to go to New York or other reserve point, and collections to go to the clerk who has the mail in charge, and who, in small banks, is collection clerk, transit man, clearing-house settling clerk, and several other positions combined into one.

THE MACHINERY OF BANKING

If we were to trace a check on the depositary bank from the receiving teller back to the depositor we would get a very good idea of the working machinery of a bank as respects the handling of a check drawn on itself. If we were to follow the route of a local check through the clearing-house we would get a very good idea of the clearing of checks. If we were to go with the messenger on his route, we would get a working knowledge of how a check, note or draft is collected by presentation over the counter of the drawee bank, or how an item such as a draft is collected from the drawee.

If we were to trace a check drawn on an out-of-town bank from the receiving teller to the transit department, then through the mails, and into the bank upon which it was drawn, and see how payment is made, we would have a

partments of the bank and a credit book for all deposits and letters. In addition he must have sheets for his city clearings and his cash items; also proof sheets for his lots or blocks of credits. These proof sheets are ruled and are of a size to be used in the adding machines. After the teller has taken the cash and coin out of a deposit and substituted a ticket in its place, the checks and credits are given to an assistant to sort, following the headings printed at the top. The one marked "Clearing-House" means the city checks; the "New York" one means New York City items; the "O. C.'s," other checks on points which the bank's correspondents in and outside of New York City, and the points South and West cover; "sundry," points not reached by the regular correspondents; "cash," the tickets substituted for bills and coin; "own checks," checks drawn on themselves; "miscellaneous," checks or drafts on brokers and checks on banks that another bank may be clearing-house agent for; and "credits," a list of the deposits or letters.

The three latter, after the items have been listed and proved on the machine, are stamped with the lot number for future reference. As soon as a proof is made the checks are immediately sent forward, except the checks on the bank itself, which have to be stamped with the receiving teller's stamp and sorted out by ledgers, and then listed on the cash book and turned over to the bookkeeper to whom they belong. The clearing-house checks are stamped and sorted in racks; the New York, O. C. and sundry checks are given to the corresponding clerks.

It is obvious that if the receipts are listed as they come in, and the items are then separated into different departments and the departments charged with the same, the total of the amounts charged to departments must equal the total as shown by the first listing. This is the "proof" that all items received have been charged out and nothing has gone astray. This, of course, does not insure that a check which properly belongs in the clearing-house checks may not go to the transit department; but as soon as the check reaches the transit department it will be discovered that it is out of its place.

In a small bank where the receiving and paying is done at the same window, and by the same man, the same proof cannot be had, for he handles many different transactions

and he must, therefore, work with a teller's proof sheet, which consists of the cash balance at the beginning of the day, the receipts and the payments, the result being the cash on hand at the close of the day. He enters receipts and

For National Banks

TELLER'S CASH BOOK.

DATE, _____

DRAFTS & CHECKS, N. Y. T. C. A. STOCK NO. 124

CASH ITEMS IN DRAWER				ITEMS	AMOUNT		
DRAFTS	DRAFTS	CHECKS	CHECKS				
				Gold in Vault,			
				Gold in Tray,			
				Gold Certificates,			
				Silver Certificates,			
				Treasury Certificates,			
				Silver \$1 in Vault,			
				Fractional Silver in Vault,			
				Silver \$1 in Tray,			
				Silver 50c. in Tray,			
				Silver 25c. in Tray,			
				Silver 10c. in Tray,			
				TOTAL COIN,			
				Legal Tender,			
				TOTAL RESERVE,			
				National Bank Notes,			
				Nickels & Pennies in Vault,			
				Nickels in Tray,			
				Pennies in Tray,			
				Mutilated Currency,			
				NET CASH,			
				Cash Items,			
				TOTAL CASH,			
				Cash Over,			
				Cash Short,			
				JOURNAL BALANCE,			

TELLER'S CASH BOOK

payments as made and any error made during the day would show up when cash is balanced at night. As opportunity affords the teller lists his out-of-town checks and charges the same to the transit department; he also lists his clearing-house checks and charges these to the clearing-house department or paying teller. The checks on his own

bank he lists and charges to the bookkeeping department. He also lists the deposit tickets and charges these to the bookkeeping department. These lists are often in sheets and when bound form a permanent record of the receiving teller's work. As the day passes accumulations are treated as just shown, so that at the end of the day he has simply his proof to make up. Usually the assistant does this while the teller receives the deposits at the window. The totals of the checks he has charged out to various departments, plus the cash on hand, must equal the total receipts of the day as shown by his total of deposit tickets. When proof has been struck, his cash is turned over to the paying teller and the day's work is done. His desk is clean for another day, and to-morrow will be another to-day.

THE "BLOCK" SYSTEM

The most expeditious and practical method of balancing the day's work in a bank is the "batch" or "block" system. Under this system the teller verifies the currency and checks off the items, but does not prove the addition of the ticket or examine the checks except to note that they have been endorsed and to calculate the exchange charges to be deducted from the total.

When the checks and deposit tickets have accumulated sufficiently to permit a "run," they are taken by a clerk who sorts the checks into the several divisions or departments. Each division of checks is then listed upon an adding machine, a separate total taken of each as a separate list and total of the cash deposited, and the amount of the exchange charges deducted. The lists of the two latter items are made up from the amounts as shown upon the deposit tickets. The aggregate of these totals, less the total exchange charges, should equal the total amount of the deposit tickets. Should there be a difference the work must be checked back immediately and the error discovered, which may consist of error in listing on deposit ticket, or error in addition of deposit tickets or error in listing on the adding machine.

The small number of items constituting a "run" permits immediate checking in case of error, consuming but a minute or so of time. When found correct, the total of each

division is posted separately upon the "block" sheet under its proper heading and the items turned over to their respective departments. This operation is repeated as often as the volume of the work justifies, until the business of the day has ceased.

After all deposits and items have passed out of hand,

CR. TELLERS DEPARTMENT THE NATIONAL EXCHANGE BANK OF ROANOKE, VA. TELLER DATE 191

CHECKS FROM TELLERS				CHECKS TO GENERAL AND INDIVIDUAL BOOKKEEPERS AND FOREIGN DEPARTMENT						
No.	DATE	TOTAL	MEMO	A. G. S.	P. to L.	M. to H.	S. to Z.	MEMO	FOREIGN AND GENERAL	
1										
2										
3										
4				FIRST NATIONAL	CITY NATIONAL	COLONIAL	BANK COMMERCE			

CLEARING TELLER'S CASH SHEET, WHICH DISTRIBUTES THE ITEMS

the balance sheet is then footed and a grand total is made of each heading, which aggregated should agree with the grand total of the deposit tickets, provided every "run" or batch has been balanced and properly listed on the balance sheet. This not only provides an absolute figure for amount of items charged to the various departments, but also provides an absolute figure for the amount of cash (currency or coin) received over the counter.

The cash upon actual count by the receiving teller him-

self should correspond with the total amount of cash as shown by the balance sheet. Differences in this respect are only due to the teller's careless handling or inability to see that the proper amount of cash (currency or coin) is received when the deposit is made.

In the larger banks which handle a large line of deposits the work should be systematized among the teller's assistants, so that one, or if the work justifies, two, will confine their attention to checking the items on the deposit tickets and sort the items for a "run." The other assistant or assistants confine their attention to the listing and proving of the different "runs," and posting them upon the balance sheet. The advantage of this system is evident in that it detects immediately any error in the deposit ticket, provides a proof of the actual cash (currency or coin) received, and balances the work as it progresses.

The receiving teller's work is practically balanced as soon as the last "batch" is run off and no longer is he compelled to go over the footings of the deposit tickets or to check back each separate item, as is necessary in case of a difference under the obsolete system formerly in general use.³

A DAY IN THE TELLER'S CAGE

The foregoing is a composite picture of the work of the receiving teller, gathered from many sources. The work of the receiving teller for a day has been fully and admirably covered by Mr. Horace F. Fuller, receiving teller of the Second National Bank of Boston, in a paper read before Boston Chapter, A. I. B. He says:

"Beginning the day's work in an active city bank where the receiving department handles all the incoming cash items, the first duty is the morning mail. As soon as received, the letters are separated into the city or clearing-house letters and the foreign. The clearing-house letters are immediately checked off or proved on the adding machines; the clearing-house checks separated from the rest and stamped, sorted in racks and listed on the clearing-house sheets, and the slips proved. This is very important, as it must be done and down at the clearing-house at ten o'clock,

³C. W. Fowler, of the Trust and Deposit Co. of Onondaga, Syracuse, N. Y., before Syracuse Chapter, A. I. B.

so a bank may have the use of the funds on that day. When the work is unusually heavy, it can be seen that speed and accuracy are required to get everything cleared up at that time.

"The rest of the checks are sorted to the various places and listed. The credits are entered in the credit book. Then the receiving teller is ready for his morning settlement. He first enters in red ink, to distinguish them from the afternoon cash, the items under the various heads. Then he takes a total of these items from his cash book and subtracts the total from the total credits, and if that agrees with the amount obtained by subtracting the afternoon clearing from the total morning clearing his settlement is right and he can go on with the day's work, satisfied that the morning letters are right.

"If wrong, the letters are first added, bills recounted and all comparisons gone over. If not discovered the error has to stand until afternoon and then the letters are re-checked. In the meantime some clearing-house bank may call up and have found the difference in checking off their clearing. This is adjusted by a charge or credit.

"The foreign letters are sorted and proved by the block of a dozen letters or so, according to the number of checks they contain. The checks are then turned over to assistants to be sorted in their various places. The New England checks are generally the largest amount, as there are 640 or more banks represented, and these all have to be sorted in racks and made up on sheets and slips printed for that purpose. The New York and other checks, or checks which are sent to the bank's correspondents in the various cities, and the sundry checks, which are on points not reached by the bank's correspondents, and have to be sent direct, are delivered to the corresponding clerks. Checks on his own bank are sorted alphabetically and charged up to the ledgers corresponding to that letter. The brokers' drafts and coupons not payable through the clearing-house are passed to the collection clerk, who sends them out with his drafts for collection. Then if the bank is clearing-house agent for any city bank their checks are sorted separately and charged on the ledgers to which they belong, and delivered to a messenger from that bank as shortly after ten o'clock as possible.

“For the items returned by correspondents for any irregularity, a charge is written on a manifold book, one part going to the bank’s customer with the item and the other part to the bookkeeper. This latter is charged the same as a check on the ledger to which it belongs.

“Shortly after ten o’clock a list is generally received from the paying teller containing what is generally known as the clearing-house outs. These consist of checks returned from the New England Clearing-House protested or for some irregularity, and possibly New York checks which have been received by the clearing-house in payment of its letters. These latter, of course, are generally charged by request, as a bank may want the New York funds for remittances or transfers. The returned items are charged as stated above.

“Often customers have a preference as to the way they want their account kept at the bank, and object to charges. In that case the receiving teller must call the depositor on the ’phone and request his check or cash in exchange for the returned item. Sometimes a request for a second presentation is made if returned for lack of funds.

“It is always well to keep all returned items disposed of as promptly as possible.

“Throughout the day, as the deposits accumulate, they are turned over to assistants to be proved in lots, stamping each ticket with lot letter to correspond. The checks are distributed as in the morning and credits entered on book. If during the day large amounts of bills are deposited by banks or corporations, these are generally charged to the paying teller.

“Shortly after one o’clock in the afternoon the second lot of returned items are charged over by the paying teller, these having been returned by the city clearing-house banks. The process of their disposal is repeated as with the morning ones.

“At three o’clock the New England Clearing, which has in the meantime been listed on sheets and the slips provided for same, is totalled and comparison made with total of the receiving teller’s cash book. It is then sent down to the clearing-house and a receipt taken, which is charged in on the following afternoon’s city clearing.

“The closing time having arrived, all deposits arriving late—except the larger ones which with the small ones must

be carefully examined for foreign items—are held out until the following day. By this time there is generally quite an accumulation of deposits on hand, and as much speed as possible must be used by the teller and his assistants so that the other departments of the bank may not be held up.

“Having made the necessary distributions of checks and credits, totals are made on all the books, the bills counted, sorted and strapped, the coin rolled in wrappers when the amounts are large enough, and the cash items listed on a sheet. The latter generally consist of brokers’ drafts of small amounts, coupons, and checks of banks for which the teller’s bank is clearing agent, and generally some return items awaiting instructions or checks from customers, together with small New England Clearing-House checks received too late for clearing. Comparison is then made with the departments which have been charging or crediting items during the day—in this case the paying teller’s and collection clerk’s and discount clerk’s.

“The receiving teller then makes up his balance, which consists of the Boston Clearing, cash items, bills and coin, and proceeds to a settlement. The collection clerk has no debit side. This is generally the case, as his receipts of notes and collections are charged over and are very much larger than the receiving teller’s debit to him. His bills and coin are added to the receiving teller’s cash items, and so appear in the general bank balance.

“The credit balance is, of course, the balance of the day before. The two sides are alike when a correct settlement is made.

“Generally some small difference will creep in and necessitates a careful going over of the cash. The bookkeepers make comparisons with the debits and credits as charged to them and the error may turn up there. The beauty of the block system as opposed to the old method of checking off is here apparent because if there is an error, as a general thing it is not in the deposit or credit tickets, these all having been proved.

“If there is a small difference of less than a dollar and it cannot be found, it is added or subtracted from the cash items, and the following day a debit or credit is made to ‘over’ or ‘short’ account on the bank’s ledger. Often there will be a difference in the city clearing due to some assistant

not making over a blind check. This latter work must always be insisted upon as a safeguard against incorrect work, as it later saves the time it might otherwise require to look through a large city clearing, though bright assistants will remember some circumstance in connection with certain checks, and the difference may be straightened out immediately.

“After the receiving teller has balanced his cash and the book work is all finished, a copy of his balance is made out on a ticket and turned over to the paying teller to become a part of the bank’s balance. In the larger banks the receiving teller’s department is divided into another department called the check teller’s department. In this case the credits and checks, after the cash has been taken out and a ticket substituted therefor, are turned over to the check teller and a proof of the bills and coin is made at the end of the day by totaling these tickets, a duplicate of which is kept on the autograph register.”

CHAPTER VI.

THE PAYING TELLER, HIS PAYMENTS AND HIS CASH

I have indicated that the logical development of this work is to trace the items that enter the receiving teller's cage to their final conclusion; and inasmuch as we observed that all the cash was turned over to the paying teller, it follows that this part of the banking operations comes next; for having brought both money funds and credit funds into the bank, we must get them out again, otherwise the machinery would become clogged.

If we were to follow the strictly logical order taken by the funds received by the receiving teller, we might next consider how the money he receives is loaned; but since the great majority of loans are in the form of credits on the books, the consideration of the paying-out process is next in order; for all funds deposited are, or are intended to be, drawn out—not through the paying teller's window, but by a process that goes through the paying teller's department, namely, the clearing-house settlements, for all checks drawn on the bank ultimately go through the paying teller.

The receiving teller's department is the front door—the great hopper into which are poured the deposits of the bank, and which furnish the raw material out of which it manufactures credit—the finished product of banking. The paying teller's department is the principal exit for the cash. The paying teller is custodian and dispenser of the bank's cash. It is piled high on his counter. He must have it in abundance. The receiving teller gets rid of it as quickly as possible. It is of no use to him once the count is verified.

We can all remember the awe with which we gazed at the piles of bills in the bank, and wondered where it all came from, and what we would do if we only had part of it. Money in bulk always impresses the average man, as does anything of great value. Witness the crowds that surround the wagons at the Sub-Treasury in New York when they are unloading kegs of gold; as if to handle a keg of gold were more of a feat than to handle a keg of nails!

But to the bank teller, money comes to have a different meaning. It is his stock in trade: precious it may be, but he handles it with alacrity as the grocer handles sugar.

RECEIVING TELLER VS. PAYING TELLER

The receiving teller does business only with the bank's customers; the paying teller does business with the public. The receiving teller has the advantage that he can check his work; that is, he can put it aside, even after once verifying it and make another proof if he is in doubt; but the paying teller after paying money out cannot detect the error until closing time comes, and then he may simply know an error has been made somewhere. If the over-payment has been made to an honest customer, who detects it, it will be returned.

QUALIFICATIONS AND ESSENTIALS OF A GOOD PAYING TELLER

The first essential of a good paying teller is that he shall keep a cool head and be courteous. He will work under pressure at times, and must be calm in the paying out of money. It must be remembered that the receiving teller can only be defrauded (a) by receipting for that which he does not get, and this is not likely to happen often; and (b) by receiving bad money, and this is not frequent. But the paying teller has many avenues for mistakes. He may pay a forged check; he may over pay. He may pay the wrong party; he may pay a post-dated check, or a stale check, or a raised check. He may over certify; allow an overdraft; and in many ways is taking risks all the time. But the first essential is that he shall know how to count money easily, gracefully and correctly, and without becoming weary.

The teller should cultivate a memory for faces and names, and know the preferences of his depositors; for it is an act of graciousness to hand one who prefers new money that and nothing else. He should know counterfeits as well as the receiving teller, from whose cage he is quite likely to have graduated. And the same qualities should obtain in both. It is hardly necessary to say that he should be neat, dignified, yet friendly, of clean personal habits, for these qualities should be found in all bank men.

IRVING NATIONAL BANK

NEW YORK.



DEPOSITOR

Name _____

PAY ROLL

	DOLLARS		CENTS
Ones in packages of \$25 & \$50			
Fives " " " 100 & 250			
Tens " " " 100 & 500			
Twenties " " 500 & 1000			
Large			
Pennies 25 & 50c Rolls			
Nickels \$1 & \$2 "			
Dimes 5 "			
Quarters 5 & 10 "			
Halves 5 & 10 "			
TOTAL			

16m 48 4-14

The qualifications of the paying teller are well summed up by a Boston teller when he says: "The paying teller should have the patience of Job, the wisdom of Solomon, the manners of a Chesterfield, the speed of an adding machine, and I might add the constitution of a Roosevelt."

THE PAYING TELLER'S DUTIES

The main duties of the paying teller are as follows: (a) To pay checks drawn on his bank and presented over the counter. These are presented by depositors for pocket cash, but most generally for payroll and other purposes where money payments are necessary. (b) To certify checks. It is quite the general custom for the paying teller to certify checks, although in large banks there may be a special window for this work, and a special certification clerk, but the duties are incidental to the paying teller's work, since the certification of a check is, broadly speaking, equivalent to paying it. If the bank is not a member of the clearing-house, the paying teller will, of course, make the settlements with other banks.

In addition to the above he also (c) has charge of the signature cards of the bank's depositors; (d) keeps a record of the stop payments; (e) makes shipments of currency to the bank's correspondents; makes up payrolls, etc. He makes deposits to the redemption fund in Washington, and through his department passes the transactions with the Treasury Department in regard to the issue and redemption of money. In some banks he also settles the clearing-house balances, and in some institutions examines the signatures and endorsements on clearing-house exchanges.

The paying teller in the course of the day receives items on other banks for cashing, just as the receiving teller receives checks on other banks for deposit and collection. There is no obligation on the part of a bank to cash a check on another bank, but it is done as a matter of courtesy.

Checks when paid are usually stamped or placed on a special spindle that perforates in a certain manner, indicating that cash was paid on the check. Even though checks are "spindle cut" to show that payment has been made in cash, they should be stamped on the back to show the date of payment.

		1-2	5	10	20	50 100	500 1000	TOTAL	
	Silver Certificates Old								
	 New								
Int	Legal Tender Certificates Old								
Res	 New								
	Gold Old								
	 New								
	Silver Certificates Old			VAULT					
	 New								
Off	Legal Tender Certificates Old								
Res	 New								
	Gold Old								
	 New								
	Silver Certificates Old								
	 New								
Off and	Legal Tender Certificates Old								
	 New								
Res	Gold Old								
	 New								
	C. H. Certificates Gold								
	Gold Certificates Old			VAULT					
	 New								
	Legal Tender Certificates Old								
	 New								
	Silver Certificates Old								
	 New								
	Gold Coin								
	Silver Coin								
	C. H. Certificates Gold			BOX					
	 Notes								
	Treas. .. to order								
	Gold Certificates								
	Silver Certificates								
	Silver in Trays								
	Nickels and Pennies								
	Federal Reserve C'y								
	Irving National C'y								
	Other								
	Ass't. Treas. Receipts								
	TOTAL CASH								

LIST OF CASH ON HAND. THIS BANK KEEPS THREE RESERVES: ONE IN CHARGE OF AN OFFICER AND MEMBER OF COMMITTEE OF DIRECTORS; ANOTHER IN CHARGE OF TWO OFFICERS; THE THIRD IN CHARGE OF OFFICER AND TELLER. THE FIRST TWO ARE DISTURBED ONLY AT TIME OF AUDIT; THE LAST IS IN DAILY USE.

THE PAYING TELLER'S CASH

The paying teller originally was custodian of all the bank's cash, all other departments handling money turning the same over to him; but as banks grew in size and their cash holdings became larger, in many banks the cash has been placed in charge of one or more officers, who control all or part, the teller accounting to them and they supplying him as his needs require.

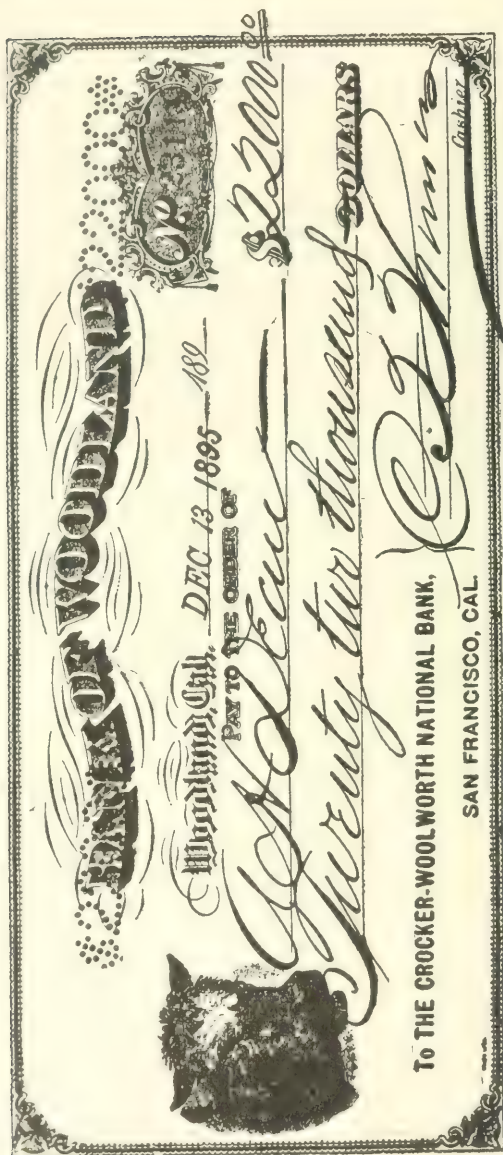
The reserve cash is usually placed by itself in large bundles, added to or taken from as the counter needs and the needs of correspondents require. At times the teller has access to all cash in conjunction with an officer, or it may be he will have access only to his counter cash. Customs vary.

The paying teller should plan to have in his cage at the opening of business an ample supply of both bills and coin to meet any demand made at the counter. Of course, in making shipments to correspondents the supply in the vault may be drawn upon, but there should be such a stock in the cage that no customer will be obliged to wait for a trip to be made to the vault. The teller can soon gauge his requirements, and will arrange his bills and coin in suitable quantities to be handled rapidly without counting.

Flat coin trays for rolled coin not only facilitate paying but aid in counting at the time of settlement.

There are various coin racks for the counter, holding just such quantities of silver coin as are most frequently called for during the day, and the automatic cashiers for paying odd change are great time savers.

Within the last few years a machine has been introduced into the banking business which, next to the adding machine, is the greatest time saver ever given to the teller's department. This is the automatic coin-rolling machine, which, under electric power, counts, rolls and wraps tightly and very speedily and accurately all classes of fractional and minor coin. The edges of the wrappers are tightly crimped like those of a paper cartridge, leaving exposed a coin on each end of the roll. The wrapper cannot be opened without tearing, and by rolling with the machine all coin deposited, one can avoid the predicament of a bank which found



ONE OF THE CLEVEREST RAISED DRAFTS ON RECORD. IT WAS ISSUED FOR ONLY \$12, WRITTEN CAREFULLY AND PERFORATED AT EACH END WITH THE FIGURES \$128 BY AN OLD-FASHIONED PERFORATOR. A FAMOUS OLD-TIME FORGER NAMED BECKER IS CREDITED WITH THE ARTISTIC ALTERATION OF THE DRAFT FROM \$12 TO \$22,000, AND HE DROVE AWAY FROM THE BANK WITH \$22,000 IN GOLD COIN.

From the Bankers Magazine

in its cash some neatly measured lengths of gas pipe masquerading as rolled coin.

The teller's cash is sorted into the various classes for making up the reserve, for all cash cannot be held in the reserve; therefore, the cash is classified and a record kept of the gold and silver, gold and silver certificates, legal tenders (greenbacks), national bank notes, clearing-house certificates, Federal Reserve notes and the subsidiary coin. The various amounts are listed on the tally slip which forms part of his daily proof. Systematic arrangement of his money is essential if he is to work quickly, as well as efficiently—knowing just where to find what he wants, in the form wanted.

Of course, all cash is put in the vaults at night, but many a teller has gone back after supper to be sure he left no cash out, and one Boston janitor is on record as having taken a long trip on the money a forgetful (they are never careless) teller left in the drawer.

An amusing story is told of a teller who purposely left all his counterfeit accumulations in the drawer—and in the days of the "wild cat banks" it was plentiful. One day he was off his post and a director took his place. Coming back the next day he was rebuked for his carelessness for leaving money in the till over night. "What did you do with the money you found in the drawer?" was the teller's first query. "Paid it out, of course," replied the director-teller.

Many banks place the cash under two combinations, requiring two men to operate. This is along the line of the policy of safeguarding the bank against the possibility of a large loss through carelessness or dishonesty or even by accident, such as occurred in one of our banks some thirty years or so ago.

The paying teller of this bank found his cash \$10,000 short one day, and though he searched high and low he found no trace of the money nor any clue to its whereabouts. He lost his position and was for a number of years an object of espionage and suspicion, and, of course, suffered severely both mentally and financially. A number of years later, in making some changes in the bank's vault, \$10,000 in large bills was found that had slipped behind or fallen beneath a partition of the safe in such a manner that only the reconstruction of the safe revealed its hiding-place.

Henry S. Holden Veneer Co.,
VENEERS,
23 SCRIBNER STREET.

No. 2120

Grand Rapids, Mich. FEB 21 1909 1909



Beaver

\$380.00

Three hundred and eighty ⁰⁰/₁₀₀ Dollars

WEST SIDE BRANCH

W. Todd

CHECK FOR \$14.22 PAYABLE TO NEOSTYLE ENVELOPE CO., NEW YORK. IT WAS STOLEN FROM A MAIL BOX IN NEW YORK. THE NUMBER, DATE AND PAYEE'S NAME WERE CHANGED, AND THE AMOUNT RAISED TO \$380. IT WAS THEN TAKEN TO GRAND RAPIDS AND CASHED AT THE BANK ON WHICH IT WAS DRAWN. THIS IS SUPPOSED TO BE THE WORK OF THE FAMOUS BOLAND GANG, HEADED BY WM. J. BOLAND, WHO SPENDS MOST OF HIS TIME IN NEW YORK PRISONS, BUT ALWAYS LEAVES A NUMBER OF "PUPILS" TO CARRY ON HIS WORK.

(By courtesy G. W. Todd & Co., Mfrs. of the Protectograph, Rochester, N. Y.)

One of the developments of modern banking is the tremendous demand for new bills which imposes an additional burden upon the paying teller—that of keeping an ample supply of all denominations of new bills and coin not only for his counter use, but to meet the requests of correspondent banks. This has had a beneficial effect upon the quality of the ordinary counter-money put in circulation, because the banks are obliged to sort their soiled and mutilated bills very carefully, which results in a high average of clean bills in daily use.

Unfit bills are sent to the Treasurer of the United States in Washington or to any Sub-Treasury for redemption, and return as new bills, and form what is practically the only source of supply of new currency. These “unfit” bills, as they are called, must be sorted into the various kinds—gold or silver certificates, legal tender or Treasury notes and national bank notes.

In making up packages of bills for redemption, not more than 100 bills, and of one denomination only, may be contained in a strap or band. Each strap must state the kind, denomination and number of bills enclosed, and must have the sender's name upon the strap.

Only one kind of bills in multiples of \$50 may be sent in a package, and not over 4,000 bills may be enclosed in one package.

The express rate, including that for the new bills returned, is forty cents per \$1,000, except for national bank notes for which the rate is twenty cents per \$1,000.

All bills received from the Treasury Department are in packages of 100, the last number of the bill number running consecutively. Many banks have rules of their own as to the strapping of money, due to the trade they handle, and endeavor to accommodate themselves to it. Silver comes from the Treasury in bags of \$1,000 for halves, quarters and dimes; nickels in bags of \$200, consisting of four \$50 bags; cents in bags of \$10. The wrapping of coin has already been mentioned in this chapter.

Upon the paying teller devolves the duty of filling the orders of correspondent banks for bills and coin. In the case of a bank with a large number of correspondents this is a daily occurrence, and the ingenuity of the paying teller is often taxed to comply with these requests and still maintain

50-912

The Bath National Bank

No.

Pay to the order of

1914

1914

\$6,000.00

Six thousand Dollars

CERTIFIED

SAID DEPOSIT DEPOSITED

FOR RENT

191

CASHIER

A \$6 CHECK CERTIFIED BY THE DRAWEE BANK, THEN RAISED TO \$6,000 AND CASHED IN OWEGO, N. Y., AS A GENUINE CERTIFIED CHECK FOR \$6,000, "WALDRON" PRETENDED TO BUY A FARM NEAR OWEGO, AND INDUCED A REAL-ESTATE AGENT TO VOUCH FOR HIM AT THE OWEGO BANK WHEN CASHING THE CHECK. HE WAS LATER ARRESTED IN HOT SPRINGS, ARK., AND SENTENCED TO FIVE YEARS IN A NEW YORK PRISON. AN EMINENT HANDWRITING EXPERT (ALBERT S. OSBORN) HAS DECLARED THAT THE HANDWRITING ON THIS CHECK RESEMBLES THE WORK OF ALOXZO S. WHITEMAN, THE FAMOUS OLD-TIME FORGER. AS A MATTER OF FACT, WHITEMAN WAS KNOWN TO BE FRIENDLY WITH "WALDRON" AT ABOUT THE TIME THIS FRAUD WAS COMMITTED.

(By courtesy G. W. Todd & Co., Mfrs. of the Protectograph, Rochester, N. Y.)

an adequate supply for his counter use. It is his duty, also, to forward to depositors currency for their payrolls by express or by messenger as the occasion may require.

In shipping currency an advice of the shipment should always be sent by mail. The messengers should be required to show the express receipts for shipments, and the acknowledgment of the receipt of the cash is shown before being filed, all this being in the nature of a check on the transaction.

Of late years the sharp competition for business has brought about a new situation for banks to meet. Some banks solicit from their depositors and others have thrust upon them payrolls to be made up individually by the bank. In many cases the number of employees on the payroll will run into the hundreds and even into thousands, and this work naturally belongs to the paying teller's department.

THE CLEARINGS

As soon as the bank opens the window work begins; but in some banks the window work is not the greatest part of the teller's duties, the inside work being of greater volume. As soon as the clearings arrive and have been posted to the ledgers they are generally turned over to the paying teller for verification of signatures. And inasmuch as most clearing-houses have rules regulating the time when checks that are not to be paid must be returned, it is essential that the teller have ample time in which to make his verifications. And the sooner he gets the clearings the better for all. He must know the depositors of the bank as to their handwriting particularly, the bookkeeping department having passed upon the bank balance. He must know what signatures are required on corporation checks and how many; and who may draw by power of attorney. He must mind his stop payments. The method of making clearing-house settlements will be found in the chapter on clearing-houses.

One of the principal duties of the paying teller is to pay the clearing-house balances. If the balance is in favor of his bank he will receive the amount and add to his cash holdings; if the balance is against him, he will pay it. Debits in New York must be paid between twelve-thirty and one-thirty, and must be in clearing-house certificates and other large gold or legal tender certificates.

Monticello Auto & Garage Co.

No. 1751

PAID TO THE ORDER OF MRS. W. T. Todd, West Va. May 23, 1914

PAY TO THE ORDER OF

Twenty Dollars

\$ 60 00

Twenty Dollars

MONTICELLO AUTO & GARAGE CO.

ROCHESTER, N. Y.

THE UNION NATIONAL BANK

612-22 CHAMBERS ST., NEW YORK

BY *W. T. Todd*

MONTICELLO AUTO & GARAGE CO.

ROCHESTER, N. Y.

\$10 CHECK FOR WAGES ISSUED TO A LAD EMPLOYED AT WASHING CARS IN A GARAGE. HE RAISED IT TO \$60, CASHED IT AND DISAPPEARED. THE GARAGE FIRM DID NOT DISCOVER THE LOSS UNTIL ITS BANK BOOK WAS CHECKED UP IN THE MIDDLE OF JULY—SIX WEEKS AFTER THE CHECK WAS CASHED.
(By courtesy G. W. Todd & Co., Mfrs. of the Protectograph, Rochester, N. Y.)

CASHING A CHECK

Who has not had a check cashed? And who has not watched the teller quickly scrutinize it, reach for the bills, pass them swiftly through his hands, hand them out and place the check on the spindle? But what happens when you pass in a check and say: "Ten fives and five ones, please, new bills"? What are his mental processes as he pays your check and listens to your comment on the topic of the day? It looks so easy—just count money all day, and go home at three o'clock—or six! Nice job this! No, not a "job," but a position, for while he was listening to you he was glancing that check over. He must assure himself: First, that it is genuine. He might know the signature well enough to pass on it without reference to the signature card in the little drawers back of him. It might be drawn by an attorney, an executor, a trustee, a guardian, an agent; and he must not only know that the signature is genuine, but that the authority is on file and in force.

The paying teller pays a forgery at the bank's peril. He is bound in law to know genuine signatures. He must be a handwriting expert. Checks are often drawn carelessly. Some people can never write twice alike (and, as a matter of fact, no two signatures are ever exactly alike—this being one test of forgery), but the characteristics are the same, and can easily be detected.

Checks may be signed with gloved hands, cold hands, in cramped places, etc., and while genuine, are difficult to pass upon quickly, and the teller must not refuse a bona fide check, for if he does he may invite trouble. Checks of customers doing an active business are easily remembered; it is the infrequent depositor who makes reference to the signature files necessary, as well as corporation checks where several officials are authorized to sign.

Second, he must know that the check has not been raised. If he pays a forged check the bank is liable. If he pays a raised check the bank is liable for all over the original amount. Therefore, he must see that it is untampered with—sometimes a most difficult feat.

A check may easily be altered by erasing the amount and figures and substituting others. This may be done very skillfully with a knife or with acids. Sometimes checks are

Lansing State-Savings Bank

\$100000

Lansing May 2. 1892

Pay to the order of Henry

Lewis \$100000

Eighteen hundred and no dollars

Third National Bank,

Detroit, Michigan.

J. Edward May

Cashier

ONE OF THREE \$18 DRAFTS PURCHASED ON THE SAME DAY AT THREE DIFFERENT BANKS IN LANSING, MICH., BY A PLEASANT OLD GENTLEMAN (DECEASED) WHO SOMETIMES WENT UNDER THE NAME OF "HENRY F. SLIPER." THE OLD-STYLE PUNCH FIGURES (\$188) WERE FILLED UP, THEN REPUNCHED FOR \$18000. THE DRAFTS WERE ALL CASHED AT DETROIT BANKS THE FOLLOWING DAY, REPRESENTING A PROFIT FOR THE OPERATOR OF \$5346.

(By courtesy G. W. Todd & Co., Mfrs. of the Protectograph, Rochester, N. Y.)

so carelessly drawn that fraud is easy, and it is a question if the fraud was invited by carelessness. It has been held that a bank depositor is liable where he draws a check carelessly and makes fraud easy. The use of safety paper—a paper with a thin coating on it which prevents any erasure without becoming noticeable—is becoming more and more common.

WORDS AND FIGURES

Checks usually have the amount in two places, expressed in both words and figures. If these two are in agreement, there is no question as to the maker's intention as to amount; but if they vary, the question arises as to which controls. The Negotiable Instruments Law gives the following instructions: "Where the sum payable is expressed in words and also in figures, and there is a discrepancy between the two, the sum denoted by the words is the sum payable; but if the words are ambiguous or uncertain, reference may be had to the figures to fix the amount."

The teller is, therefore, justified and protected in paying the amount expressed in words, the law recognizing the fact that a man is more apt to express his intentions when writing the amount in words with deliberation than in making figures, although in practice it is quite likely to be the reverse. Some tellers make it a rule to pay the lesser amount, irrespective of whether words or figures express it.

Any erasures should be carefully investigated, for any material alteration will void the instrument. The use of safety paper is to be encouraged in this respect, inasmuch as any change, however slight, will readily appear.

Third, he must see that it is not dated ahead. The authority of a bank to pay is only good when the date of the check is of the same day or an antecedent day. The teller must not pay a check to-day which is dated to-morrow, for by to-morrow the maker may put a stop order on it and cancel the check. He must watch the dates.

If the check is not dated at all the teller can be satisfied about that detail, for the Negotiable Instruments Law provides that "where the instrument is not dated, it will be considered to be dated as of the time it was issued." The teller can fill in the date as of the day presented, without incur-

JAN 5 1915

No. 2905



St. Louis

National Paper Company

Pay to the Order of *Mr. Drostey* *Fourty Dollars* *40.00*

Dollars

National Paper Company

Central National Bank

R. F. Smith

Am. Express

CHECK FOR \$14.95 ISSUED TO THE POLAR WAVE ICE AND FUEL CO. IT WAS STOLEN FROM A MAIL BOX BY AN ORGANIZED GANG. MEMBERS OF THE GANG IN A HIRED LIMOUSINE THEN CALLED ON THE DROSTEN JEWELRY CO. AND SELECTED A PAIR OF DIAMOND EARRINGS WORTH \$145. THEY AGREED TO SEND THE CHAUFFEUR WITH A CHECK FOR THE JEWELRY THAT AFTERNOON. ACCORDING TO AGREEMENT, THE MAN APPEARED WITH THIS CHECK, WHICH HAD BEEN RAISED FROM \$14.95. THE POLAR WAVE CO.'S NAME HAD BEEN ERASED AND DROSTEN JEWELRY CO. WRITTEN IN ITS PLACE, SO THAT IT APPEARED PERFECTLY REGULAR. MR. DROSTEN TOOK THE PRECAUTION, HOWEVER, TO STEP ACROSS TO THE CENTRAL NATIONAL BANK, WHERE THE CHECK WAS PRO- NOUNCED GOOD AND A CASHIER'S CHECK FOR THE AMOUNT WAS ISSUED TO MR. DROSTEN. THE FRAUD WAS DISCOVERED SEVERAL DAYS LATER, AND RESULTED IN LITIGATION BETWEEN THE BANK, THE NATIONAL PAPER CO. AND DROSTEN JEWELRY CO.

(By courtesy G. W. Todd & Co., Mfrs. of the Protectograph, Rochester, N. Y.)

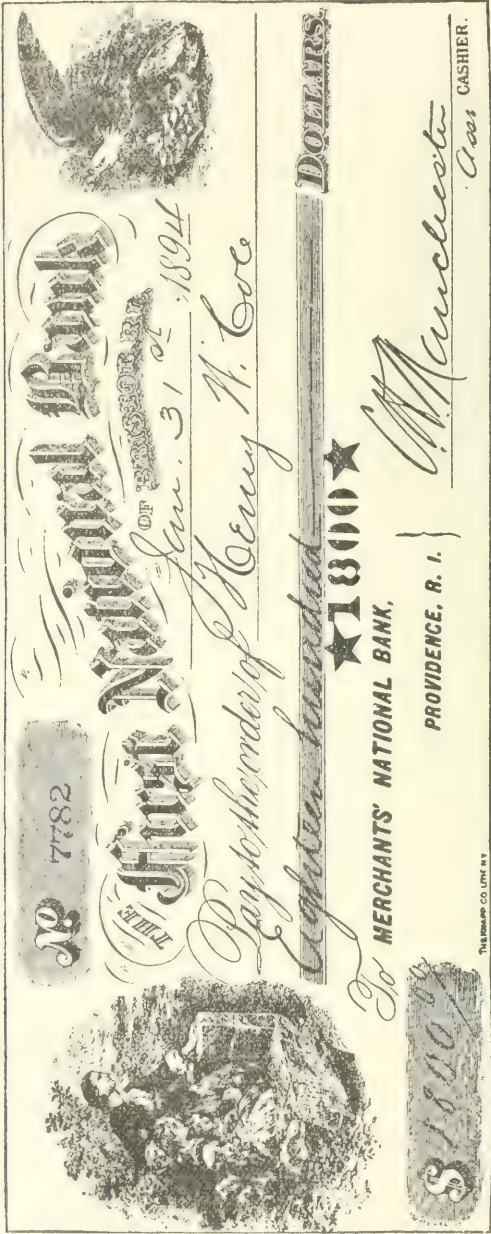
ring responsibility, although it would seem a better practice to have the person presenting the check attend to this.

If the check is post-dated the teller should refuse to pay until the date borne by the check arrives. If he should pay before the date and the maker of the check suffers any damage by reason of it, the bank is liable.

Should the check bear a date considerably previous to the time of presentation, it is what is known as a stale check and puts the teller on inquiry. As to how old a check must be to be considered stale, has not been decided by the law. A check a month old has been decided not to be stale, but one five months old has been so considered. The teller must decide this question after a consideration of all the facts. If he knows the maker and the person presenting and indorsing it; if he feels certain it is all right and the maker has funds to pay it, he can take the chance. He should, however, come to this conclusion bearing clearly in mind that he is assuming some risk.

IDENTIFICATION

Fourth, he must know you, or you must be identified. The check, presuming it to be drawn by a third party to your order, or indorsed to your order, is payable to you, and payment to anyone else is unwarranted, and not good. It may be a bearer check, payable to holder, but most checks are payable to designated payees, and this one, let us suppose, is payable to you. Therefore, he must pay you or your order. And to identify you may be difficult. You are not known. You offer to bring in your chauffeur; your lawyer; your wife; and the teller, sad to relate, does not know either. You produce a letter addressed to yourself and say: "There, you see, I got this check in a letter this morning." "Yes," the teller observes, mentally, "but you might have stolen it from the mails. How do I know?" Of course, the teller doesn't say so in words, but shakes his head and says: "We must have someone whom we know." He must use judgment and tact in getting identification, and in the case of small checks, such matters as letters, monograms and other documents in the bearer's possession may be accepted. The indorsement of one of the bank's customers is, of course, the best identification—if it is genuine.



FAC-SIMILE OF DRAFT RAISED FROM \$18 TO \$1,800. THE FIGURES WERE CUT WITH AN OLD-FASHIONED "BANK PENCIL."

And in being firm but kind, the teller often has to take abuse for being so "very particular"—"finicky," as a woman would put it, forgetting what the risk really is and how many losses and headaches tellers have had by taking a chance and losing.

One instance will illustrate the attitude of mind of some people toward the paying teller. Some years ago a man presented for payment a check for a fairly large amount and had some difficulty in producing satisfactory evidence of his identity. Finally, he rolled back his sleeve and showed his arm upon which was tattooed his full name. "There, young feller," he exclaimed to the teller, "do you think I stole the skin?" In another case a woman presented a check for too large an amount to take a chance on, and after telephoning to the drawer and getting a satisfactory identification the teller cashed the check. As the woman took her money she said: "You must have a lot of crooks coming in here." As to telephone identification, unless the teller is quite familiar with the voice of the party claiming to be talking, such identification is dangerous to accept.

A few years ago, on a Saturday morning, the paying teller of a bank was called up on the telephone by a man representing himself to be the cashier of a corporation keeping a large account with the bank. He stated that the clerk who ordinarily went to the bank was sick, and that he was sending a new man with a check for \$1,200, which he wished to have cashed, and gave a full description of the man who would call for the money. This seemed all in good form, and later on a young man answering the telephone description appeared at the teller's window with the described check. He remarked to the teller that the cashier telephoned about his calling for the money. Something aroused the teller's suspicion, and he immediately telephoned the corporation office for a confirmation and found that no such message or messenger had been sent. The impostor made his escape, leaving the check, which proved to have been taken from the back of the check book and the signatures cleverly forged.

It is suggested that when identification is obtained it be in the nature of an indorsement if possible, so that in case of subsequent trouble the one identifying the party to whom payment was made may at least be located, if not held liable for the fraud.

NEW YORK, _____ 191__

TO IRVING NATIONAL BANK
NEW YORK.

PLEASE STOP PAYMENT ON OUR _____

DATED _____, NUMBERED _____

TO THE ORDER OF _____

FOR \$ _____ WHICH HAS NOT BEEN CHARGED AGAINST OUR
ACCOUNT ON THE STATEMENT FOR ANY PREVIOUS MONTH.IF DUPLICATE OF ABOVE IS PRESENTED, PLEASE PAY AND CHARGE
TO OUR ACCOUNT.WE UNDERSTAND THAT YOU WILL USE YOUR BEST EFFORT TO AVOID PAYMENT OF THE ITEM
MENTIONED ABOVE, BUT AGREE NOT TO HOLD YOU LIABLE ON ACCOUNT OF PAYMENT CONTRARY
TO THIS REQUEST SHOULD IT BE OCCASIONED THROUGH INADVERTANCE OR ACCIDENT

SIGNATURE _____

ADDRESS _____

THIS REQUEST TO BEAR ONLY SIGNATURE AUTHORIZED ON CHECKS.
IF ORIGINAL BE RETURNED PLEASE CANCEL THIS ORDER.IN ISSUING DUPLICATE CHECK PLEASE WRITE DUPLICATE ACROSS FACE OF
CHECK OVER AUTHORIZED SIGNATURE

STOP PAYMENT NOTICE

CROSSED CHECKS

In England the banks have been by law relieved of responsibility for cashing checks without identification, and an English teller will hand out money all day without thought as to whether the one standing at the window is entitled to the funds or not. But the English custom gives the bank protection in what is known as the "crossed check," which is merely the drawing of two parallel lines across the face of the check and writing "& Co." between. This, in effect, restricts the presentation of the check for payment by any other than a bank. And, in effect, it prohibits the party from collecting the check except through his bank. By act of Parliament a bank is prohibited from paying checks that are crossed over the counter. If the drawer knows the payee's bank, he can cross it "specially" by writing the name of the bank between the lines, and it can then only go through that channel.

STOP PAYMENT

Fifth, the teller must assure himself that payment has not been stopped on the check. It is the maker's right to draw checks as often and for as much as his bank balance warrants; and he has the legal right to stop payment on a check at any time before it is actually paid; therefore, if he notifies the bank not to pay his check and payment is made, the bank cannot charge his account with the amount. These stop payment orders cause much confusion and give the tellers much concern, and are a source of annoyance; but as long as this is the law and the custom, it must be part of the teller's duties to watch out for the stop payments. It is one of the paying teller's duties to see that no such check shall be cashed by him.

A card is made out for the paying teller's cage which has a space for the date, number, amount, payee's name and signature of the depositor, and also for the date when the order to stop payment was received by the bank. Below there are spaces to record the date of presentation for payment, and for date of cancellation over the depositor's signature, also for the bookkeeper's initials, to show his receipt of the notice. A second form is for the bookkeeper and contains the essential data of the other card.

These stop-payment cards should be filed in the paying teller's cage in some form for instant reference. In addition, a visible file may be used containing the most recent stops, for these are the most dangerous. A check which is long antedated will almost surely catch the teller's eye and send him to his stop-payment file, for the best of memories is a treacherous faculty. In filling out these stop-cards the depositor's signature is always to be obtained when possible.

If the request to stop payment is received by telephone a confirmation by letter should be asked for, and when a stop-payment letter is received that fact should be noted on the card with the date of receipt, and the letter preserved for reference either in a file for that purpose or among the letters of the day. The cancellation of a stop-payment order should always be made over the signature of the drawer, either upon the card itself or by letter. These are by their nature a matter of record, an essential point in any transaction involving the payment of money.

Checks coming through three sources, the paying teller, the clearing-house and the mails, there must be a record of a stop payment in each place where the check will be passed upon before paying. In some banks this is merely a memorandum placed somewhere where the bookkeeper or teller, or both, can see it; but such methods are not to be encouraged; there should be order above all things. Of course, when a check upon which payment has been stopped is presented it is so marked that it cannot circulate further. A slip may be attached or memo made on the back, preferably the former. Payment may be stopped on a check by legal process. The law may prevent its payment. The account may be garnisheed, and if so, no checks should be paid while the process is effective. And in case of controversies in organizations, where factional fights have developed, payment may be suspended until the bank is certain of its authority to pay, especially if it has had notice that there is irregularity in the election of officers or other causes of which it should take cognizance. If the ownership of the account is in doubt, the easier course is to pay the money into court and let the disputants settle the matter between them.

Lastly, the teller must be certain that the drawer is good for the amount. In a small bank, the teller may keep his ledger where the cashier keeps his credit department—

Form 17-5M-4-13-S

Copy to all other Tellers and
Bookkeeper effected

National Exchange Bank
Roanoke, Virginia

Memo:

Information

Received by..... Authority { Letter
 'Phone Filed..... A.M.
 Personal P.M.

Stop Payment Withdrawn.....

STOP PAYMENT CARD—FILED IN TELLER'S AND BOOKKEEPER'S DEPARTMENTS

“under his hat”; but in a large bank this is impossible. Of course, some accounts are so steady that the teller knows that they are never overdrawn, always good for all checks issued and need concern himself only that the above tests are met; while other accounts are so uncertain, so generally near the danger line, that to make a payment without verifying the balance would invite an overdraft.

Credit is a timid creature and easily shocked; and the credit of the maker must not be injured while the teller is verifying the balance. To shout out so that all in the lobby can hear: "Is William Smith good for fifty-five dollars?"

STOP PAYMENT ACCOUNT OF _____

DATE *RECEIVED	DATE OF CHECK	PAYABLE TO	NUMBER OF CHECK	AMOUNT	ITEM RECEIVED	DUPLICATE PAID	REMARKS

STOP PAYMENT—LOOSE LEAF REGISTER

would do Mr. Smith an injury and certainly be undiplomatic on the part of the teller. He must get the information in some quiet manner. In the unit system, elsewhere described, he can refer the check to the bookkeeper, who is near at hand, but in some banks, this individual is far away, it may be ten stories above, and so other methods are used. First comes the telautograph which reproduces the handwriting of the teller on a roll of paper in the other department. He, therefore, presses a button and writes "William Smith fifty-five?"

The clerk at the other end writes back, "yes," and the teller pays it, and no one but the two know about the transaction by wire. There is also the interior telephone, the pneumatic tube and messengers, but the end and aim of all is to get the information quietly and quickly. And becoming satisfied on all these points, he pays the money as you direct him, in "ten fives and five ones," spindles the check¹ and the transaction is closed. It may have taken but a few seconds' time, but much has been done in that short period.

Checks are occasionally made out in pencil, and this practice, while rare, is sometimes bothersome. Such a check may be easily altered; and while the law would, no doubt, hold such a check good, it being nowhere said that a pencil is not a proper writing instrument, yet the practice is so fraught with danger that only small checks should be so accepted. The risk of the bank is great enough in any event without adding the temptation to easy alteration.

BEARER CHECKS

A check payable to bearer, "cash," "currency," or to a fictitious payee is payable to bearer and the teller may cash it without identification or indorsement. It is negotiable by delivery. But as a matter of precaution all such checks should be indorsed, and bearer checks should not be encouraged. So far as the author has been able to determine, there is no case which covers the point as to whether or not a bank may insist upon indorsement as a requisite to cashing a check payable to bearer; but as a matter of record, to trace the course of the instrument and to fix the liability of the party, his indorsement should be obtained. A man who

¹The mutilation or cancellation is to prevent further negotiation.

will not indorse a check upon which he receives payment is either worthy of suspicion or a stickler for conventionalities.

Mr. William McChesney Martin of the St. Louis Federal Reserve Bank tells of this incident:

"An account was opened for about seven hundred dollars. When the book was first balanced all had been drawn out except about fifty dollars. Shortly after receiving his cancelled checks the depositor came in and claimed that some three hundred and fifty dollars had been paid out on forged checks. He exhibited these checks. They were all for small amounts payable to bearer, and none of them had been endorsed. Upon an investigation it seemed clear that the checks in question had all been signed by the depositor himself, but in a disguised hand, his intention being to claim that they were forgeries. Every handwriting expert to which they were submitted came to this conclusion and detectives reported that the man was a member of a gang who were equal to this kind of thing. The bank refused to consider the checks forgeries and refund their amount and the depositor sued. In the search that was commenced for evidence, it developed that someone had handed these bearer checks to some mature newsboys found on the street, and would give them a quarter or half dollar to go in and cash them. The boys, however, who actually cashed the checks could never be found, with the result that the bank had to go to trial without any witnesses except handwriting experts. The case was compromised, the bank being glad to get off with a partial payment of the amount claimed, though certain it was being imposed upon. If these bearer checks had contained the names of the persons presenting them, these persons could have been found, and the bank would not have been a victim of fraud. Since the experience of that bank, it has never cashed a bearer check without requiring the name of the person presenting it."

THE CERTIFICATION OF CHECKS

The certification of a check being essentially payment (the depositor's account is charged and certified checks account credited), and the holder being powerless to revoke the check after it is certified, and the bank becoming liable for the check as soon as it certifies, it follows that the same

ceremony is necessary as obtains in paying a check; except that the bank need not assure itself that the holder is the rightful owner, for it may certify "Good when properly indorsed." The usual method is to write the words:

Certified for \$.....
Date
Signature

Right here let it be said that the certification stamp should have plenty of ink on it. So very many certifications are faint and hardly discernible that it must be exceedingly annoying to have to strain the eye to ascertain the certification. And where it is certified, as frequently happens, "Certified, payable at the Blank Trust Company"—a custom that obtains in many large cities, where small banks will certify through their clearing agent, a little care as to ink pads will be timely, and save a multitude of harsh thoughts.

The bank is, as above stated, liable for its certification whether the drawer is good or not, and should only certify against actual balances. There was a custom, now fast dying out, particularly in stock exchange transactions, for banks to over-certify. In fact, certify to that which did not exist. This is against good banking principles. The bank would often agree to certify up to a certain amount, and thus become liable for the amount so certified irrespective of the borrower's account. One large bank in New York was wrecked by this practice. It is no longer in favor with good banks, being a loan without security.

In certifying, a record is kept of the number and amount of the check, date and depositor's name and payee. This is generally put through by the teller in the form of ticket, which becomes the bookkeeper's authority to make the charge. When the check comes in it will be filed with the ticket among the vouchers.

The general bookkeeper has a certified check record giving the full details, and enters the date of payment against the items. The balance of this account is the total amount of certified checks outstanding.

In cities where stock exchange transactions are numerous, certification plays an important part in the financial operations and is a very important function of the teller. He is furnished every morning with a list of brokers and their morning balances. Provision is made for the entry of

deposits and checks that pass through during the day. The receiving teller advises the paying teller of deposits made on these accounts, and the paying teller enters checks certified, so that he has the balance always before him. As soon as the clearings of the day are over and charges made to the ledgers these amounts are deducted from the morning balance as shown on the sheet, so that the teller has accurate information all day as to the status of the broker's account.

The payment of a debt in the form of a certified check does not become effective if the bank fails before the check can be presented. An action would lie against the bank as well as against the one from whom it was received; but where a check is given for payment and the holder has it certified and the bank fails before making payment, the maker or indorser cannot be held, on the ground that the holder had the option of taking money or certification, and by taking the certification absolutely released the maker of the check.

It is settled law that a bank does not have to certify a check. It can only be required to pay the money, but if it sees fit to assume the responsibility of certifying, it has a perfect right to do so. It also has a right to charge the drawer's account with the amount of the check, even though the request to certify the check is an oral direction and the only evidence the bank has of a proper demand is the word of its teller as recorded in the certified check register.

In a Missouri case, *Bank of Springfield v. The First National Bank of Springfield* (30 Mo. App. 271), the reason is well explained. The court said: "The certification of checks is well known to be one of the greatest dangers to the integrity of their funds with which banks have to contend. The power to certify checks, unless guarded and restrained, is nothing less than the power of a corrupt teller, or other servant, to give away the funds of the bank. Such abuses have been produced by the exercise of this power that prudent banks, as is well known, have generally discontinued the practice of certifying checks and have substituted therefor the practice of taking up the check tendered for certification and issuing in its place their own cashier's check which is tantamount to their own promissory note."

It is a common practice for all New York City banks to certify checks. This is doubtless due to the fact that many

large payments are made daily and this is the easiest way to handle them. Checks are also certified to a considerable extent by banks throughout the country. In St. Louis and other places, however, financial institutions make it a rule not to certify checks, and whenever they do so are certain that it is impossible for their customer to transact the particular business in hand without such accommodation.

Another point is to guard against certifying before or after bank hours for any person except the drawer of the check. Of course a bank will accommodate a depositor by certifying upon his demand whenever there is a proper officer to sign, but there is an element of danger in certifying before and after hours for a third party. A condition of affairs like this might arise: A depositor might issue a check after bank hours and then find that there was an error in the amount or that the check was fraudulently procured and would wish to stop payment. Relying upon the lateness of the hour he might notify the bank by mail to stop payment, knowing that the notice would be received by the bank before it opened for business the next morning; or he might even telephone at the time of discovery, only to learn in either case that it was too late. It would doubtless result in loss to the bank.

THE PROTECTION OF BANK CHECKS

The principal risk which a bank runs to-day is not that of the burglar or the sneak thief, although they are operating everywhere, particularly in the small places; but even in the large cities, the sneak thief occasionally manages to make a good haul in broad daylight and in a bank using every precaution. In a recent instance in Brooklyn, \$10,000 was stolen from the cage during the noon hour, while the teller was for the moment disengaged.

In 328 cases of bank frauds in a single year, all but twenty were cases of forgery, and the risk in banking to-day is that of the check forger, who either passes bogus checks or raised instruments. Speaking on this subject at various times, William J. Burns, the famous detective, has said:¹

¹From "What Burns Says," pamphlet issued by the G. W. Todd Co., of Rochester, N. Y.

"Now, as between merely forged documents (manufactured 'out of whole cloth') and the genuine document on which the amount is 'raised' or altered, the danger to those signing and handling the altered instrument is infinitely greater. In fact, from some of the remarkable examples of 'raised' checks, drafts, stock certificates and promissory notes that I have examined lately, it would indicate that the 'raised' amount is more dangerous to the financial peace of organized society than the nitro-glycerine can of the professional dynamiter.

EASE OF OBTAINING GENUINE CHECKS FOR "RAISING"

"The methods of the forger, too, in obtaining checks signed by responsible men and business houses are most interesting, as showing how difficult it is to guard against the 'check raiser.' For instance, they have developed a trick lately of sending a small but perfectly good check of their own to some business house. Then, after there has been plenty of time for it to be duly deposited, there follows a polite letter, notifying the intended victim that a mistake was made in sending this check, that it should have been addressed to another house of similar name in another city, and will they kindly return the money?

"In complying with this perfectly proper (?) request, the average business concern naturally responds by sending its own check for the amount to the writer of the letter, explaining that his check had been deposited before his letter arrived. And this check, by the way, is invariably for a very small amount, as the 'check raiser' does not care to invest more actual money than is really necessary.

"You will see that a \$5 check signed by a good concern is just as good for his purpose as a \$5,000 one, because he can twist the 'five' into 'five thousand' with very little trouble and only a drop or two of acid and another drop or two of ink—provided the concern has not taken the thoughtful precaution to protect its check before sending it to the polite stranger. (And, by the way, it is amazing how many otherwise conservative concerns there are in this country that will safeguard everything connected with their business except their own signatures—which represent all the rest of their property put together!)

"On receiving the little genuine check, the forger then

performs his interesting operation by the use of bleaching acids, removing the design of the paper if necessary, and restoring it after the amount has been altered to suit his needs. He fills up perforations, or punchings, if necessary, and the inks of the best manufacturers are scarcely proof against his skill, since he can remove even printing and lithographic ink when necessary. Moreover, in many cases, it is not required to remove anything at all, as many small amounts can be changed by 'penning'—simply adding a few pen strokes to the original amount—and there you are!

"When the alteration is finally discovered by the concern that issued the check, the question is, 'How are you going to prove the alteration?' Or, 'Which one of the several endorsers on this check was the guilty party?' It is a very difficult situation, and one that can rarely be cleared up to the satisfaction of the bank, its depositor, the correspondent banks, and others concerned.

"I might mention that we have recently investigated cases where they managed to alter checks in such a way that they actually left no loophole through which to prove the fraud and indict them for forgery—and they accomplished it in somewhat the following manner:

CASHING A "STOP PAYMENT" CHECK

"Orders had been given to a bank to stop payment on a certain check for a certain amount, payable to a wholesale house, dated on such a day, number so-and-so. It was believed that the check had been stolen. Twice within two months the bank was reminded to be on the lookout for this check—and then, in the last hour of a busy Saturday morning during the third month, the check slipped through. But the bank was not to blame.

"The forger had first 'raised' the amount by several hundred dollars. Then he changed the number of the check, and brought the date right up to that very day, as though the check had been given to him only a few minutes previous to his appearance at the bank—although the check was really nearly four months old. Lastly, he had removed the name of the rightful payee (the wholesale house) and written his own name instead, so that he did not have to forge an indorsement. He was properly identified, indorsed the check with his own name, took the money—and disappeared.

There was absolutely nothing of the original writing left but the genuine signature. How could you blame the bank?

"Moreover, the work was so perfectly executed that it is doubtful if it would have been possible to prove the alteration even if the swindlers had been caught. They were not, for the fraud was not discovered until nearly two weeks later, when the signer of the check looked over his bank account and found it short.

"I have told you all of this in detail, so you will understand that I have a reason for the statement that it behooves every bank to see to it—and every business house as well—that all precautions are taken in making out their checks, regardless of the responsibility or honesty of the party to whom they are issued.

"The most practical plan, I think, up to the present time at least, is to use a Protectograph, limiting the amount of the check by forcing a heavy ink into the body of the paper under high pressure. This limit does not leave any profitable margin to pay the swindlers for their exacting work and the risk of punishment, so it may be considered scientific protection, and represents the highest development thus far in the field of anti-forgery devices. (See note page 144.)

ADVISE DEPOSITORS HOW TO STAMP CHECKS

"I would suggest in using the Protectograph that the limit be stamped just above the signature and in close proximity to it, so that any attempt to tamper with the check will necessarily result in defacing the signature, which alone gives the check its value.

"In New York and other cities we are constantly finding proof of the cunning employed by these crooks to gain their ends, and I will give you a few illustrations to show how difficult it is to safeguard yourself against their methods.

"We will say that a band of swindlers desires to know what amount it will be safe to use in tampering with the check of a certain concern, what number to use, etc.

"About five o'clock in the afternoon a young man calls at the office of the concern and states that he understands his employers have had complaints from the head of this firm about the paper furnished for its checks fading out or

turning color. The head of the business has gone home and the bookkeeper suggests to this young man that he call the following day.

"The young man then asks if he may examine some of the cancelled checks to see what reason there may be for the complaint. He asks to see some of the old checks and also some of the recent ones, for purposes of comparison, which seems reasonable, and some of the checks are produced from the vault.

"By a little sleight-of-hand, which is part of his business, the rascal manages to abstract one of the recent checks, and thus goes away armed with all the working material and information that he needs. He may utilize the old cancelled check by filling in the 'Paid Stamp' perforations and changing the amounts, dates, etc. At any rate, he has possession of a genuine check, which is a mighty dangerous instrument in such hands.

SAMPLE CHECKS MUST BE SAFEGUARDED

"In one case the swindlers desired to use the sample check merely as a 'model' from which to prepare a big forged check, and they managed without much trouble to get possession of some blank check forms of this concern, on which they did a very neat piece of work and secured about \$10,000 from one of the biggest banks in New York.

"The checks being printed specially with the name of the concern in peculiar type, and on a special tinted paper manufactured only for this particular bank, in connection with other circumstances surrounding the case, the deduction was that the blank check must have come from the printer who made the checks for this bank.

"I called upon the printer, and he told me that it was absolutely impossible for any person to secure one of these checks. I asked him what precaution he took for safeguarding the checks. He went to a drawer and brought out a large book, containing samples of the various checks he had printed. I asked: 'Wouldn't it be possible to get some of those?' He answered: 'Oh, no!' I then told him my purpose, that I was there as a representative of the American Bankers Association, to determine how the forger had secured those checks, and he assured me it was absolutely im-

possible, that the checks in question must have been stolen from the firm or counterfeited.

"Then I asked: 'Would it be possible to get them from the pressman?' 'No, because we count out the sheets given to him, and he accounts for them.' So I asked: 'Would it be possible to get them from the bookbinder?' 'No,' he replied again, 'because the same method is followed with the bookbinder.'

"I then pulled from my pocket ten of these checks, and said: 'Where do you suppose I got these?'

"He looked at them in astonishment, and said: 'Why, I don't know.'

"I said, 'Why, I just pulled them off your wall, among six or seven hundred other samples hanging there. You did not see me get them?'

"'Well,' he said, 'that couldn't happen but once.'

"So I left him and went to the press room, and there I succeeded in finding a number of samples of checks, but not of this particular sort. I next called at the bookbinder's, and there obtained twenty of the same identical checks, thrown to one side by the binder. I carried those back to the printer, and I said to him: 'What is the use of a bank taking any precaution to pay for security in printing of this character, when any person who wants to do so can get the checks at will? And moreover,' I pursued, 'the very assumed security of this work you are doing makes it all the more dangerous to your customers; because these checks are supposed to be safeguarded, and the banks generally so regard them, and when they get in circulation, as in this case, they are calculated to fool not only the banker, but the merchant, anywhere, because it is supposed to be impossible for outsiders to get possession of such checks.'

HOW BANKERS CAN PROTECT THEIR DEPOSITORS AGAINST CHECK FRAUDS

"These are some of the questions, gentlemen, that the bankers must take up for the protection of the world of banking and business. They must see to it, first of all, that the printer who prints their checks takes greater precautions toward preserving those checks from crooks. Then, in the next place, they must use their good offices with deposi-

tors to see that they are careful as to the manner in which they issue their checks.

"I do not mean that depositors can avoid giving checks to strangers—because the strangers will find a thousand ways of getting them, anyway—but they can write them in such a manner that they will not be a positive invitation to crookedness, as so many checks are at the present day."

EDUCATING THE DEPOSITOR

The bank owes it to itself to educate the depositor in the proper method of drawing checks. The raising of a check by a clever forger is easy. It can be made difficult, if not quite impossible, by these precautions which every bank should bring to the notice of its depositors: (1) Use safety paper, good ink and plenty of it. This reduces the chances considerably, although not entirely; (2) write the figures well up against the dollar sign; make the figures strong, the "00/00" in such a way as to leave no room for other cyphers; (3) write the words in a heavy hand, beginning well to the left and filling all spaces with a bold wavy line; (4) use the best protecting device that can be found; (5) issue no checks to strangers; (6) balance the book with the check book and prove the indorsements as soon as vouchers are returned. By promulgating these simple rules, much loss and annoyance may be saved.

It is a rule of law that the bank pays forgeries at its peril, and cannot be held blameless if it pays forged or raised instruments; but many checks are issued in such open defiance of all due precaution that it would be a manifest injustice to the bank to hold it liable for raised checks made easy by the careless drawing on the part of the depositor. The author has found no adjudicated case where the loss has been placed on the maker by a court of high standing; but it is certain that if the depositor follows the rules above laid down he could not be held liable; while on the other hand, if he invites loss to the bank it would be unjust to hold him harmless.

The following citations are in point:

"If by any act or negligence on the part of the drawer, as by so carelessly writing the check as to render it easily open to material alteration without leaving evident traces of

such alteration, the customer has furnished the opportunity for the fraud which has deceived the bank, he must suffer the just consequences of his carelessness by bearing the loss himself.”—*Morse on Banks and Banking, Sec. 480; and Young vs. Grote, 4 Bing. 253.*

“For clearly a bank has a right to demand some duties from its customers, in such an important matter as protection from fraud, in a business where frauds of a particularly skillful and ingenious nature are continually in course of perpetration.”—*Morse on Banks, 235.*

“The drawee can be held bound only to know the signature of the depositor, and not the handwriting of the body of the check, the money paid in good faith and without negligence on an altered check, may be recovered by the bank.”—*United States—Espey vs. Cincinnati Bank, 18 Wall (U. S.) 614.*

“The maker of check is bound to use recognized safeguards in protecting his check against alteration, where an innocent holder may sustain loss.”—*Daniel on Negotiable Instruments.*

THE BANK'S PAYROLL.

The payroll is often made up by the paying teller, or by an officer. This is usually done so that the employees will not know what each other receives. There are two sides to this question. It may spur a man on to know what the man ahead of him earns, or it may lead to jealousies as to the other's worth. Some banks have a payroll so that all salaries are receipted for by the men, each knowing what the other receives; while others have a payroll book, in which the clerk simply signs for the salary for the period and no amount named, the amount being covered by a receipt which is enclosed in an envelope with no other marking than his name, so that he alone knows the amount. On pay day the envelopes are passed around, generally with new money, the receipts enclosed therein, to be signed and dropped in a box, and checked against the payroll in the book.

One of the duties that falls to the lot of the paying teller is to furnish money for payroll purposes for customers; and in large establishments this is a big item, and one of the principal avenues for the utilization of the bank's cash. As

an act of courtesy to the teller, payroll money should be asked for as early as possible, so as to give him time to put it up without undue haste, and also not to keep a line waiting. If it can be furnished early in the morning, or a day before, so much the better. The requisition for payroll money is usually made on forms provided for that purpose indicating just the various denominations required. Some banks in an effort to get business have agreed to put up the payroll at the bank, and this is a heavy task to place upon the paying teller, as it involves much labor.

THE TELLER'S MISTAKES

The paying teller should have all due protection from outside interference, so that any shortages will be directly traceable to him and nowhere else. He should be caged, and the cage locked against all comers. In case of shortages, where more than one or possibly two have access to the funds, the question arises as to who is responsible, and if clerks are allowed to enter the cage abstractions might take place, and while small to the teller or to the bank, would look large to the pilferer, and might be large in their consequences.

Where the receiving and paying is done at the same window, notes and drafts collected, change made, and all sorts of transactions put through, there is more liability for error than where the work is specialized, and only one class of transactions handled.

But whatever the cause, the error should be reported. It is but fair that it be so; for if it be covered up it will surely lead to trouble, and any bank officer who is fair-minded, experienced, and fit to hold his position, will understand that such things are liable to happen.

An error against the bank is, as has been well said, "a fight with conscience"; while if it is against the depositor he will hastily report it. An "over," if a short payment (to be paradoxical), will quickly rectify itself. But considering the amount of money handled, and the time in which it is handled, the wonder is that so few mistakes are made.

Herein the savings bank teller has the advantage. He has the signature of all his depositors. He has their pedi-

gree. He does not have to take chances—he can use his machinery. He can be reasonably certain of his payments. He can use due care always.

Some banks require tellers to make good their “shorts,” but do not permit them to retain the “overs”—a poor practice. The principle is wrong, and all discrepancies should, after due search, be carried to “overs and shorts,” until such time as the balance may be charged to profit and loss as incidental to the business. The moral punishment is sufficient, and no teller is knowingly careless.

THE PAYING TELLER'S RECORDS AND FILES

The items received by the paying teller are usually all debits, for he pays out. The checks drawn on his own bank are charged to the bookkeeping department; other checks are charged to the transit department. If the teller makes the clearing-house settlements, these checks will be held for the morning clearing. Having the cash balance of the day before, he charges himself with all receipts from the receiving teller, and credits himself with all payments, the balance being the net cash on hand. If he receives from or pays to the clearing-house, he debits or credits himself accordingly.

The bookkeeping in the paying teller's cage is very simple. He has a cash book or blotter in which are recorded all items passing through his cage. This book is arranged in columnar form, with a debit column for each teller and bookkeeper to whom he may have occasion to charge items, and a credit column for those from whom he may receive them. The adding machine can be used for listing and the slips pasted in their respective places. This will frequently save considerable time. The totals of the several credit columns show the cash, checks and credits to general accounts received from the receiving teller, note teller, and so forth, and the exchanges from the clearing-house. These are added to the previous day's balance. From this amount is taken the total of the various debit columns, which represent checks charged to the individual bookkeepers, and checks on other banks charged to the receiving teller or clearing-house or transit department, and charges against accounts on the general ledger.

The balance should agree with the teller's cash and cash

PAYING TELLER—PROOF SHEET

For					191				
DEBITS				Folio	ACCOUNT	CREDITS			
						Debit Clerk			
						Credit Clerk			
						Loan Department			
						Collection Department			
						Coupon Department			
						Exchange Department			
						Receiving Department			
						Trust Department			
						Reorganization Department			
						Securities			
						Foreign Department			
						Transfer Department			
						Total Departmental Balances			
						Office Cash			
						Chase National Bank			
						First National Bank			
						Nat'l Bank of Commerce in New York			
						National City Bank			
						To-day's Clearances			
						Exchanges			
						Sundry Debtor			
						Expenses			
						Suspense			
						Time Certificates			
						Demand Certificates			
						Accrued Interest Payable			
						Commissions			
						Exchange (out of town)			
						Certified Checks			
						Treasurer's Checks			
						Fifth Ave Branch			

PAYING TELLER'S PROOF SHEET—USED BY GUARANTY TRUST COMPANY OF NEW YORK, A
HIGHLY DEPARTMENTIZED INSTITUTION

items. If correct it is entered in the teller's daily cash sheet, and with the balances of the other tellers, makes up the cash balance for the day. This total will balance with the general cash book of the bank.

The paying teller's department has in its custody the files containing the signatures of customers and those authorized to sign on behalf of persons, co-partnerships and corporations having accounts with the bank. These are filed in an

orderly and readily accessible manner. The certification register, the teller's check list and the teller's proof book complete his books of entry or record.

Signatures may be as follows:

Individual.

Joint—one or more persons interested in the same account.

Co-partnership—signatures of either one or more partners binding a firm.

Corporation—by officers—authorization showing officers empowered to sign on behalf of corporations as shown by excerpt from by-laws or resolutions passed at meetings of directors, and a copy of the minutes of the meeting at which these officers authorized to sign on behalf of the corporation were elected. This extract or copy being signed by the secretary of the meeting and impressed with the seal of the corporation, is kept in files at the bank where it may be readily referred to.

Banks' signature cards showing specimens of signatures of those authorized to sign on behalf of such banks should be certified to over the signature of the cashier and kept in signature card files.

Power of Attorney—Signature by attorney is a signature of a person or persons appointed to sign in the name of another person, company or officer of a corporation, and these powers should also be kept in files where they are readily accessible. Some are executed to give a limited authority, and others are sufficiently general in their scope to permit the attorney to do all of the things in connection with the bank account that the principal may be permitted to do.

Agent, Manager, Special, Etc.—When signing in this manner the principal need not necessarily be revealed.

Administrator, Executor, Trustee—Must be accompanied by a proper authorization, and these very titles are sufficient in themselves to put the banker upon notice that proper authorization is required.

The Certification Register—The teller's check list, and the teller's proof book admit of a range from which a selection may be made from a number of good forms to suit the requirements and needs of each bank according to the size

TELLER'S BALANCE

[illegible]

RECAPITULATION

[illegible]

SHEETS

[illegible]

INDIVIDUAL BOOKKEEPERS ENTER ITEMS ON THIS BOOK—WORD "OFF" MEANS RETURNED
ITEMS

of the bank, the arrangement of the department or the size of the community in which the bank is located.²

²Henry Billman, Cashier North Side Bank of Brooklyn, before New York Chapter.

WHAT I DO BY ANOTHER I DO BY MYSELF

What a man may do by himself he may do by his agent; and the acts of the agent within the scope of his authority are the acts of the principal; therefore, a depositor in a bank may delegate his right to draw upon the bank by proper authority, which is most frequently by power of attorney. This may be limited or unlimited, and includes, as a rule, the right to indorse. The right to indorse only may be given, but the right to indorse does not include the right to draw checks. The power must be in writing, explicit, and cover the ground fully, so that the bank will know that the agent or attorney has exact powers and what they are. Such signatures should always be in the form: "A, by B, attorney," and not simply "B, attorney, agent, etc." A knowledge of the law of agency is here applicable and the teller should know how far the principal is liable and how far the agent, and see that in the acts authorized the agent binds the principal and not himself. Sometimes he binds neither.

The death of the drawer of a check revokes his order and the teller is charged with notice not to pay as soon as knowledge of the maker's death is received.

THE MONEY TELLER

Having considered the paying teller's department from the standpoint of the average teller in the average bank, let us look at another phase of the subject, that of the paying teller in the large bank, say, with deposits of \$60,000,000 to \$100,000,000 or more.

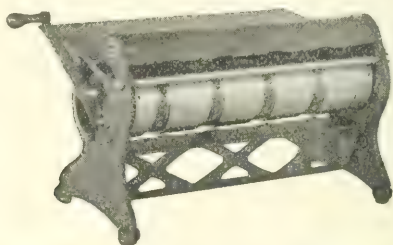
In a bank of this size the first paying teller needs to give all his time to the care and distribution of the bank's cash, leaving to the other tellers the paying of checks, waiting upon depositors and all other details of the department.

He will have under his charge a cash balance varying from \$5,000,000 to \$15,000,000 of actual money. The larger the institution the greater will be the fluctuations in the bank's holdings of cash. This money comes into the bank from two sources, the greater part of the bills of the smaller denominations being deposited with the receiving tellers, while those of large denominations come from clearing-house balances and the Sub-Treasury. The small bills are depos-

ited in sums varying from a few dollars from individual depositors up to great bundles brought in by large corporations, railroads and from correspondent banks. The loose bills are verified by the receiving tellers and sorted into the tills to be made up into packages as soon as time permits.

It is customary for banks to furnish their depositors with bill straps, with printed spaces for the amount, the depositor's name and date of deposit. During the day these bills are sent to the bill teller's department in their original wrappers. In a large bank it is not an uncommon occurrence to receive as large a sum as \$700,000 in a day, and the bill teller's department in such a bank is a busy one.

In this department there may be fifteen to twenty bill



CURRENCY-CUTTING AND SIGNING MACHINE—ONE TURN OF THE HANDLE CUTS FOUR NOTES AND SIGNS THEM

counters, whose duty it is to verify all these various packages of currency, to cull out the unfit bills, and to sort and arrange the good bills in form suitable for use at the paying teller's windows and for shipment to correspondent banks. An average of from thirty to forty per cent. of currency so deposited is unfit for circulation.

These bills are counted so that ones and twos are in \$100 straps; fives in \$500 straps; tens in \$1,000 straps, and twenties in \$2,000 straps, the straps being of different colors that they may be readily distinguished. At the close of the day the even packages are sent to the paying teller, the odd amounts and unverified packages remaining with the bill teller, who keeps a debit and credit account with the paying and receiving tellers.

With this amount of cash it is extremely important that it shall be stored in the vault in such shape that it may be readily verified. Uniform sized bundles of the different denominations may be made up containing twenty packages

each of the various denominations, so that each bundle of ones and twos would contain \$2,000, the fives would be in a \$10,000 bundle and the tens in a \$20,000 bundle, the different colored straps instantly indicating the denomination. Then each denomination being stored by itself it is a matter of a very short time to verify a large balance of cash.

For the purpose of having an accurate record of this cash a vault book is kept showing the actual amount of each denomination. The daily changes are recorded by a debit and credit account in the vault book, charging the vault with such amounts as are put in, and crediting it with amounts withdrawn, striking a balance at the close of the day; then, as the vault total is entered as one item on the teller's settlement, any error or omission is bound to show in the settlement.

The bills of the larger denominations, excepting national bank notes, form the greater part of the bank's reserve against deposit liability, and are practically all gold certificates, fifties, one hundreds, five hundreds, one thousands, five thousands and ten thousands. The fifties and one hundreds are usually counted into packages of \$5,000 each, and the larger denominations into such sized packages as is most convenient to the teller, an accurate record of which is also kept in the vault book.

A few of the largest banks, by an arrangement with the Treasury Department, and a large number of country banks, receive directly from Washington all the new currency issued to those banks to replace their unfit bills which have been destroyed. This amounts to a very large sum in the course of a year, and adds very materially to the large bank's supply of new bills.

The large bank maintains a completely equipped printing office which prints upon the bills the signatures of the respective officers and cuts and trims the sheets of bills. Recently in one of our largest banks 20,000 bills were prepared for circulation in less than two days.

A surprisingly large amount of fractional currency is used daily in a large bank, it not being an uncommon occurrence to pay out \$50,000 in a day. This fractional currency is rolled and packed in heavy, flat, tin trays holding one layer of coin, and is stacked up in the vault, each de-

needed, and that without paying or charging a cent of premium.

During certain seasons of the year currency flows into the city banks in large volume, and then at other seasons the tide turns and the flow is all outward. It is the duty of the paying teller to anticipate these seasonable movements of money and to accumulate or distribute his cash as the case may require. It is much easier to relieve a surplus than a shortage.

Every department of a large bank is an almost independent organization. The executive officers, being occupied with their own duties, must depend upon the heads of these departments for details; so it is necessary that the paying teller's records shall enable him to answer promptly and accurately any question concerning the bank's cash.

The daily routine of the first paying teller may follow somewhat upon these lines: Long before the bank opens for business he has received and filled the requisitions for bills and coin from the other paying tellers, perhaps from \$200,000 to \$400,000 each, according to the day of the week or season of the year. Then the requests from correspondent banks are made up and sent to the express companies. In a year of good business the banks in manufacturing centers make heavy demands for currency for payrolls. Between nine and ten o'clock the brokers' clerks bring in their checks for certification, and in an active stock market these certifications will run into the hundreds daily. At ten o'clock the Sub-Treasury opens for business, and large deposits are made daily, on account of the five per cent. funds of correspondent banks, for shipments of silver, transfer of funds, etc.; and so through the day constant demands are made upon the paying teller until the closing hour, and then if remittances are very large and New York funds are scarce and at a premium he may have to ship \$1,000,000 in small bills to a dozen New York correspondents.

The duty of caring for such large sums of cash and of anticipating the needs of the future call for good judgment, ability, experience, energy and integrity.³

³From an address delivered by Mr. E. W. Jones, paying teller of National Shawmut Bank before Boston Chapter, A. I. B., Nov. 19, 1912.

FIGURING THE RESERVE

One of the features that distinguishes European from American banking methods is the reserve. In Europe the reserve is optional, while in this country it is obligatory. In European countries no reserve is stipulated by law, the banks being left to themselves in this matter, to carry as much or as little as the occasion requires. The Bank of England has had as low as fourteen per cent. and as high as fifty-seven. The Bank of France sometimes has as high as seventy-five per cent., but in the United States the reserve requirements have never been over twenty-five per cent. for reserve and central reserve cities and less in other places, although banks have carried as high as fifty per cent. at times.

There is no uniformity in this country except under the Federal Reserve Act, which specifies the reserve that must be carried by all member banks. State banks and trust companies which are not members are subject to State laws and in these there is no uniformity. The reserve, however, is always larger in the large cities than in country districts, and the reserve on time deposits smaller than on demand deposits.

The lawful reserve of a bank consists of its balances with reserve agents and its money holdings of such character as the law stipulates shall constitute reserves, which in the National Banking System does not include national bank notes, although State banks and trust companies are permitted to count such notes in their reserves.

The statement of condition is for two purposes: (a) To ascertain the condition of the bank, and (b) to afford a basis for figuring the reserve, for until the liabilities are known the reserve requirements cannot be ascertained. The reserve requirements of the Federal Reserve Act, summarized, are as follows:

Country Banks
12% of demand
and
5% of time
deposits,
of which

- 4/12—In own vaults (for first 3 years 5/12).
- 5/12—In Federal Reserve Bank of home district (2/12 for first year, and 1/12 for each succeeding 6 months up to 5/12).
- 3/12—In own vault or in Federal Reserve Bank (for 3 years this may be held in own vault, in Federal Reserve Bank, or with reserve agent as at present).

Reserve City
Banks
15% of demand
and
5% of time
deposits,
of which

5/15—In own vault (for first 3 years 6/15).
6/15—In Federal Reserve Bank (3/15 for first year and
1/15 for each succeeding 6 months up to 6/15).
4/15—In own vault or in Federal Reserve Bank
(for 3 years this may be held in own vault, in
Federal Reserve Bank or in national banks in
central reserve cities).

Central Reserve
City Banks
18% of demand
and
5% of time
deposits,
of which

6/18—In own vault.
7/18—In Federal Reserve Bank.
5/18—In own vault or Federal Reserve Bank.

‡Demand deposits are those payable within 30 days; time deposits those payable after 30 days and those subject to not less than 30 days' notice.

Federal Reserve Banks may receive, as one-half of each installment of reserve, paper acceptable for rediscount.

Reserve funds in Federal Reserve Banks may be checked against to meet existing liabilities, but reserve must be restored before new loans or dividends can be made or declared.

Section in former law providing that 5% redemption fund be considered part of reserve is repealed.

No member bank shall keep on deposit with a non-member bank more than 10% of its own capital and surplus, except where State laws specify that reserves of *State Banks* shall or may be kept with *State Institutions*. Deposits so kept, for a period of three years after organization of Federal Reserve Bank of District, shall be considered as reserve deposits with proper reserve agent.⁵

For present purposes we are concerned, in the main, as to how the reserve is computed, for it includes various items and excludes others. The calculation of the bank's reserve in national banks is as follows:

For banks outside reserve and central reserve cities add the following: Due to approved reserve agents. Due to banks other than Federal Reserve Banks.

Deduct: Due from banks other than Federal Reserve Banks or reserve agents.

Should the aggregate of amounts due from banks exceed the amount due to banks, both must be omitted, since it is an asset and not a liability.

Add to the above: Dividends unpaid; individual deposits (demand); five-twelfths of time deposits (for first twelve months after date of organization of Federal Reserve Bank).

Deduct: Checks on other banks in the same place; exchanges for the clearing-house. Twelve per cent. of this amount is the reserve required.

⁵Pamphlet issued by the Guaranty Trust Co. of New York.

Items composing the reserve are: Balances with approved reserve agents; balance with Federal Reserve Bank; fractional silver; silver dollars; silver Treasury certificates; gold coin; gold Treasury certificates; legal tender notes (greenbacks); gold certificates payable to order; clearing-house certificates. National bank notes are not permitted to be held except in State banks and trust companies.

It follows, as stated elsewhere, that the bank must keep its money separated for reserve computations, and this is usually done by keeping most of the reserve by itself in a separate compartment. A study of the appended form used in computing reserves in member banks in the Federal Reserve System will be helpful and explain the process fully.

THE UNIT SYSTEM

Banking principles are the same, whether it be in a fifty-million-dollar bank or in a modest hundred-thousand-dollar institution in some small hamlet where the cashier is the whole bank, knows everybody and everybody's business, whose credit department is "under his hat" and whose identification book is his knowledge of the people of the town. He may open the bank, build the fire, get the mail, answer letters, attend at the window and the board meetings, and be the whole bank in himself: and the modern bank, with its vast and seemingly complex organization, is but the evolution of this one-man institution.

No matter how large or how small a bank may be, the work divides itself into three departments, the executive, the teller's and the accounting. And every detail of the work must come under one of these classifications. If a letter comes in with collection items, it is the teller's work to prove the listing, and the accounting department's function to record and acknowledge. It may not be the money teller or a designated mail teller, but it is teller's work, nevertheless. If new men are to be employed, it is executive work. If a letter of inquiry comes in, it may be part of the accounting function to get the facts for the executive's information. These functions lock and interlock, so that it may seem complex in a large bank, and exceedingly simple in a small one: but the only difference is in the degree and not in the kind of work involved. One man may perform all three func-

tions, or only one; but the same work must be done in every bank whether it handles millions or only thousands.

These functions, of course, are closely allied, the one being dependent upon the other. The work may be highly departmentized as in large city banks, or done by one man who is executive, teller and clerk. But by reason of the independence, to a certain extent of each department, it may be segregated and perform most of its functions alone, being united to the others through the executive and supervising departments. And as one department may be separated so two may be, and the unit system contemplates taking the teller's and the bookkeeper's work and uniting them into a little bank, completely equipped to handle the depositor's business in all things except the granting of loans.

As the business of banking grew in popularity and volume, new ways and methods were devised to meet the increasing demands, first, by adding more men to the force, and then by departmentizing the work, so that each man had his special work to do, and all dovetailed together. Intimacy could no longer be the rule and machinery had to take the place of personality, and the personal equation no longer obtained. The most logical development was to divide the work of the tellers and bookkeepers into sections, preferably by alphabetical arrangement. By this method the tellers became acquainted only with depositors in their section. For instance, the tellers in the A, B and C window never met the depositors in F, G and H. There was thus lost that personal contact with all depositors that is so desirable in banking. As a solution of the difficulty, and to expedite the work, we have the unit system, by which the work of paying and receiving is done at the same window. The author found this system in use in Canada a few years ago, but the credit for introducing it in this country belongs to Mr. Stoddard Jess, vice-president of the First National Bank of Los Angeles. The depositors are classified according to alphabet, and the work of receiving, paying and bookkeeping for each group is done as a unit. The window work is performed by as many tellers as necessary, and in close proximity are the bookkeepers and statement clerks, so that the whole work of caring for the current needs of a group of depositors is performed in a limited area and each is complete in itself.

Numerous banks throughout the country have used this system with satisfaction, particularly the Irving National Bank of New York, the First National Bank of Denver, Colorado, and others. It is especially adapted to banks having a large counter trade, but does not work so well where the bulk of the transactions are through the clearing-house or by mail. Moreover, the equipment must be arranged for such work, and in building new buildings this system is often introduced.

In such a system there must be a controlling account to assemble and prove the figures of all the units, the latter turning over to this head unit, or chief bookkeeper, all excess cash, and obtaining from him all supplies of money. Both deposits and withdrawals being handled at the same window, there is a movement of money both ways, so that only net cash is dealt with. There is, of course, liability of confusion due to handling two kinds of work, which did not obtain under the old system of segregating the work into receiving and paying departments.

In a Chicago bank the accounts are divided into groups, but the receiving and paying is done by different men. In this bank each unit is complete in itself, inasmuch as the customer can make deposits, cash checks, and obtain certifications, statements, vouchers and stationery at the same window.

The unit tellers' system was devised by the First National Bank of Los Angeles, Cal., to meet the growing needs of the bank due to the increasing business with depositors, which was caused by the growth of the bank in popularity, and by taking over other institutions. The problem was to take care of about 15,000 open accounts, requiring forty individual ledgers. The result was the bank was divided up into several little banks, as a department store is composed of several smaller stores, each complete up to a certain point, and this is the key to the unit system. Mr. Stoddard Jess, who devised the system tells how he introduced the idea in the bank, from which it has spread to several other banks with like problems. Writing in "The Bankers Magazine," he said:

"In the spring of 1905 the First National Bank of Los Angeles had about eight thousand accounts with individual depositors on its books, the business being handled by three

receiving and two paying tellers in rather an unsatisfactory manner, for the reason that notwithstanding the fact that the work was divided alphabetically among the tellers, still the number of depositors presenting themselves at each paying teller's window was about four thousand—too large a number for the tellers to know personally. Another difficulty seemed to be that at certain hours of the day the paying tellers were kept very busy while the receiving tellers had but little to do; again, at other times and particularly just before the closing hour, long lines would form before the receiving tellers' windows, and business in the paying tellers' cages would be slack. Just at this time, and with these conditions existing, it was decreed that the First National Bank should take over the business of two other national banks in the city, with nearly seven thousand additional accounts. The problem this brought was how to arrange to care for nearly fifteen thousand accounts requiring forty individual ledgers to hold them in a manner to give satisfactory service to the depositors.

"At some time in my life I picked up the idea that if anything was too large to handle as an entirety, the proper solution was to reduce it into parts; and recognizing the successful application of this principle in the organization of the modern department store, which is nothing more than an aggregation of small stores and up to a certain point under separate control and management, I asked myself the question, Why not divide the bank up into a number of small banks, in alphabetical sub-divisions, each to have its own clientage and each to be under the control of one teller who should receive as well as pay and who should have an assistant to do such work as the teller might see fit to turn over to him—thus following out the methods of the smallest country bank.

"While this plan recommended itself theoretically, and seemed to offer a satisfactory solution of the problem, it was such an innovation in the field of commercial banking that it was with some hesitation that I advanced the idea. Our tellers unanimously pronounced it entirely impracticable for them to both pay and receive. Not believing their position to be well taken, having performed the same duties in a country bank myself, I concluded to make the innovation and give the scheme a trial. To do this required a change in

the construction of the counter line. I arranged to divide the bank, as it were, into nine small banks—one for lady customers exclusively, and eight according to the following sub-divisions of the alphabet: A-B, C-D, E-G, H-K, L-M, N-R, S, T-Z.

“In carrying out the plan, eight cages were constructed on one side of the bank, the ladies’ department being removed for convenience to another location; each cage of the same size, nine feet long and six feet wide, with two windows in each at the counter line, one marked ‘Teller’ and one ‘Assistant,’ with a compartment back of each cage four and one-half feet wide by nine feet long, for a bookkeeper to handle the detailed ledger containing the accounts of the depositors whose names commenced with the letters on the front of the cage.

“In the working out of the system the amount of cash necessary, and to be adjusted from time to time, is given into the custody of each teller to remain in his possession and under his control, a coin truck being provided for each, which is locked and wheeled into the coin vault at night and taken out each morning by the teller and placed in the cage under the counter in a place provided for it between the teller’s and assistant’s windows. Both the teller and his assistant handle the cash, and at the close of the day’s work both are required to count it and initial the teller’s sheet which is turned into the auditor. It is made the duty of the auditor to count the cash in the possession of each teller at irregular intervals, not more than six days apart, and turn in a report of his findings to the cashier.

“The object of having the bookkeeper immediately behind the cage is for the convenience of the teller or his assistant in securing information in regard to the condition of the depositor’s account.

“The objects gained by the system are:

“First—Retaining the personal equation between the teller and his customer. By dividing the alphabet so that all customers whose names begin with A-B, etc., transact their business at one cage, it makes a clientage for each cage of from 1,500 to 1,700 depositors, a number that it is entirely possible for the teller to know personally, giving the teller the advantage of being able to call his customer by name and to become acquainted with the standing of the depositor

and the character of his account, allowing the teller to render better and prompter service than would otherwise be possible.

“Second—The system properly handled prevents the formation of long lines before the tellers’ windows, thus expediting the transactions of business and preventing congestion in the lobby. All customers fall in line in front of the teller’s window. The duty of the assistant is only to do such things as the teller may direct and not take any business on his own initiative. When a customer presents himself at the teller’s window desiring an assortment of change to make up a payroll, or with a long list of items on a deposit slip to check up, transactions that take time and so impede the progress of the line, the teller passes the transaction over to his assistant and requests the customer to fall back to the assistant’s window and receive his payroll or his pass-book containing the proper credit entry. If the teller uses discretion in handling the business as indicated, it results in the formation of two lines—one a fast-moving line in front of the teller’s window, and, when necessary, a slow-moving line at the assistant’s window, each customer in which, if kept waiting, keeps somebody else waiting in turn and consequently has no just cause of complaint.

“Third—The advantage to the customer in allowing him to transact all of his business with one teller at one window. The depositor that desires to cash a check as well as make his deposit appreciates the opportunity of being able to do both at one window rather than to be obliged to work his way up in line to a receiving teller’s window and then fall back and work his way up again in a line to the paying teller’s window.

“After a trial of over a year and a half, all our tellers are convinced that the method is entirely feasible and say that they cannot see how the same volume of business could be handled by the old system of segregating the paying and receiving tellers; the customers express their appreciation of the service rendered, and the management of the bank feel that the innovation has succeeded in solving the difficult problem of handling the large number of accounts in a manner far ahead of all expectations.

“To give some idea of the volume of business passing through the bank, I would state that in one day recently we

handled in the various departments over twenty-two thousand items."

PROVERBS OF A PAYING TELLER.⁶

It is more blessed to pay than receive, for at the end of the month thy recompense is greater than his.

Moreover in union there is strength; therefore happy is he whose salary is fixed by the board, rather than by the officer.

My son, despise not an overage and in the latter day it shall requite thee, for a false balance is an abomination; but a five-dollar shortage is simply —.

The forward man stoppeth payment upon a check; and she that loseth a voucher diggeth a pit.

Better is a little cash and a just balance than much currency and a shortage therewith.

The foolish woman telephoneth for her balance; but the wise teller seeth her first.

He that is short-changed returneth again; but the one with the extra ten tarrieth not.

The cashier hath forbidden an overdraft and pay-day is afar off; but he knoweth not that the employee's check is in the cash.

The customer layeth wait and the messenger lurketh privily to destroy thee without a cause; but a good endorsement is a strong tower.

Who hath woes, who hath sorrow, who hath redness of eyes, even he that cometh upon a counter error two days afterward. Verily he seeketh in vain for help.

Seest thou thy neighbor diligent in checking over the day's work? Say not, "Hast thou a difference?" Even a fool, when he holdeth his peace, is counted wise. Mayhap he practiceth penmanship or seeketh some reason why his salary has been raised.

As a man that taketh away a garment in winter, so is he that singeth songs when thou hast a difference.

He that whistleth over his work and he that robbeth a dead body are on their way to the same place.

The Treasury sendeth new currency and the clerk cut-

⁶J. S. MacDonnell of the First National Bank of Pasadena, Cal. Paper read before Los Angeles Chapter, American Institute of Banking.

teth it asunder; but the naughty person winketh with his eyes and sayeth, "Aha, aha, thou art making money fast." Of the surety, one generation passeth away and another generation cometh; but that joke abideth forever.

Seest thou a man getting a check book for his wife? Jest not with him, lest he tell thee that hoary one regarding her overdraft and all the stubs she had remaining.

This have I observed—one man hideth his money in his bosom and another putteth it in his trousers' pocket; but the stout woman hath them skinned to death for a safe place.

I had rather be a doorkeeper in the house of the Lord than count the collections therefrom on Monday.

Six things do I hate, yea, seven are an abomination unto me; a stop payment, a go-back, an overdraft, he that coughs in thy face, he that dabbleth in the cash, the deaf man that cannot be identified and one from just beyond the Needles, who speaketh as a wise man of the East.

Hearst thou one that saith, "Lo, this is done in the East," or "Lo, it was never on this wise in the East." Pass not nigh unto him, for a hayseed lurketh in his hair, neither hath he at any time been a day's journey from his own dunghill.

One woman leaveth her glasses at home and another is nervous in the morning; but she that signeth her name without making excuse, the same is not a bride.

Happy is the woman that findeth new currency, for the merchandise of it is better than the merchandise of silver.

He that bringeth a "go-back" in season receiveth fine gold, but a slothful messenger receiveth a fine without gold.

The nervous man rusheth in haste to the wicket, he snatcheth the coin and hasteth away; also he treadeth heavily upon the feet of the innocent; but the prudent one catcheth the same car, neither forgetting his umbrella.

Once have I observed this, yea, twice have I known it; for the simple one sayeth, "It is all one, pay me silver or gold, large money or small, it matters not, seeing it is soon spent." Possess thy soul and wait upon him patiently, for he will not depart until thou hast changed all his money seven fold.

He that introduceth a friend and will not endorse for him, hath not understanding, and to argue with him is like casting pearls before swine.

The foolish one saith, "Lo, I have covenanted with a gold piece for a newspaper, and with a five-dollar piece have I purchased a ride on a street car, therefore pay me in currency, lest my riches depart from me for that which is naught." My son, refrain thyself from him, for he never had more than four dollars.

My son, put not thy trust in perfume. Follow hard after her if thou wilt, but look up her check first.

THE ACID TEST FOR COINS

Formulas to make the acids for the tests of gold and silver are as follows:

For gold: Six and one-half drams nitric acid, one-quarter dram of hydrochloric acid and five drams of water.

For silver: Twenty-four grains silver nitrate, thirty drops of nitric acid and one ounce of water.

If after a careful examination of the coin the first suspicion is not allayed, the acid test may be used. If it does not affect the coin, then the metal is genuine, but if it turns it black, the coin is counterfeit.

Note: There are several protecting devices on the market, some cutting the figures out of the paper, others stamping the words "not over ——— Dollars" into the fibre of the paper. Other devices called "check writers" impress the exact amount in words into the paper on the line provided for writing the words. The author leaves it to the reader's judgment as to the mechanical qualities of each. They are all based on the one idea—of impregnating the paper with an acid-proof ink in such manner as to destroy the surface of the paper and prevent alteration.

Bank Directors should bear in mind that Section 5191, U. S. Revised Statutes, forbids a Bank to increase its liabilities by new loans or discounts, or to declare any dividend when its reserve is below the legal requirement.

CALCULATION OF THE LAWFUL MONEY RESERVE OF NATIONAL BANKS LOCATED ELSEWHERE THAN IN RESERVE CITIES AND CENTRAL RESERVE CITIES.

No. of Bank	Report of the state of lawful money reserve of the	Located at, State of, at, o'clock
C. H. Certificates for coin or legal tender \$		
11. In vault (not less than $\frac{1}{2}$ of total required reserve shown in Item 10)	\$	16. With Federal Reserve Bank \$
12. With Federal Reserve Bank (not less than $\frac{3}{17}$ of total required reserve shown in Item 10)	\$	17. List not balances with agents: \$ \$ Total \$ * (If more than $\frac{1}{17}$ deduct excess) \$
13. With approved reserve agents (not more than $\frac{1}{12}$ of total required reserve shown in Item 10)	\$	18. Total held \$
14. Total required (must agree with Item 10)	\$	Excess in vault over amount required \$
Deficiency in vault	\$	Excess with Federal Reserve Bank over amount required \$
Deficiency with Federal Reserve Bank	\$	Excess over total required reserve \$
Deficiency in total required reserve	\$	
Per cent of Item 18 to 9	$\frac{07}{100}$	

* This subtotal must not exceed amount shown in Item 13.

† Excess with Reserve Agents to be included here.

 Bank Directors should bear in mind that Section 5191, U. S. Revised Statutes, forbids a Bank to increase its liabilities by new loans or discounts, or to declare any dividend when its reserve is below the legal requirement.

CALCULATION OF THE LAWFUL MONEY RESERVE OF NATIONAL BANKS LOCATED ELSEWHERE THAN IN RESERVE CITIES AND CENTRAL RESERVE CITIES.

No. of Bank Report of the state of lawful money reserve of the
 Located at, State of, at . . . o'clock . . . m.

ITEMS ON WHICH RESERVE IS TO BE COMPUTED.

Should the aggregate "Due from" exceed the aggregate "Due to" Banks, both items must be omitted from the calculation.

- | | | | | |
|--|--|--|--|--|
| 1. Due to Approved Reserve Agents | | | | |
| Due to Banks other than Federal Reserve Banks | | | | |
| LESS— | | | | |
| 2. Due from Banks other than Legal Reserve with Federal Reserve Bank and Reserve Agents (See Schedule 1) | | | | |
| 3. Dividends unpaid | | | | |
| 4. Demand Deposits | | | | |
| 5. $\frac{1}{12}$ of Time Deposits | | | | |
| 6. Gross amount | | | | |

DEDUCTIONS ALLOWED.

- [illegible]

REQUIREMENTS FOR NET RESERVE AND ITEMS COMPOSING RESERVE ACTUALLY HELD.

Legal Reserve Required.

Legal Reserve Held.

- | | | | |
|---|---------|---|---------|
| 11. In vault (not less than $\frac{1}{2}$ of total required reserve shown in Item 10) | \$..... | 15. Silver Dollars | \$..... |
| 12. With Federal Reserve Bank (not less than $\frac{1}{2}$ of total required reserve shown in Item 10) | \$..... | Fractional Silver ..... | ..... |
| 13. With approved reserve agents (not more than $\frac{1}{2}$ of total required reserve shown in Item 10) | \$..... | Silver Certificates ..... | ..... |
| 14. Total required (must agree with Item 10). \$..... | | Legal Tender Notes ..... | ..... |
| Deficiency in vault | \$..... | Gold Coin ..... | ..... |
| Deficiency with Federal Reserve Bank | \$..... | Gold Certificates ..... | ..... |
| Deficiency in total required reserve | \$..... | Gold Certificates payable to order ..... | ..... |
| Per cent of Item 18 to 9 | % | C. H. Certificates for coin or legal tender | \$..... |
| | | 16. With Federal Reserve Bank | \$..... |
| | | 17. List not balances with agents ..... | ..... |
| | | | \$..... |
| | | Total | \$..... |
| | | * If more than $\frac{1}{2}$ deduct excess) | \$..... |
| | | 18. Total held | \$..... |
| | | Excess in vault over amount required | \$..... |
| | | Excess with Federal Reserve Bank over amount required | \$..... |
| | | Excess over total required reserve | \$..... |

* This subtotal must not exceed amount shown in Item 13.
† Excess with Reserve Agents to be included here.

CHAPTER VII.

CLEARINGS AND CLEARING-HOUSES

The settlements which a bank makes with its customers are not in the main in cash over the counter, but through the medium of bank clearing machinery which offsets the debts of one bank against the debts of another in total, whatever difference there exists being paid in money. It is apparent that if a bank were to assemble all the checks it receives in the course of the day on every other bank, and present them over the various counters and receive payment in cash, it would not only require the use of a large amount of money, but consume time, involve risk and prove highly unsatisfactory to all concerned. The most likely substitute would be for the banks to exchange checks, and adjust the differences. If there were not many banks in the same city the interchange of checks in this manner might be satisfactory, but it would be cumbersome; and if messengers were to be sent out to do this work, they would no doubt soon evolve a plan whereby they might meet at some central point and make their exchanges.

The clearing-house has been defined as "an institution maintained by an association of banks, acting under self-governing rules, for the purpose of facilitating concerted action among its members in adjusting accounts against each other with the greatest ease and at a minimum cost, and to strengthen the credit of all members by mutual watchfulness and assistance in times of stringency."

The clearing-house is not, as a rule, finely housed as is the New York Clearing-House, whose palace of marble and bronze is one of the ornaments of lower New York, but it is more often a simple organization of banks, meeting in a convenient place from time to time, and making the daily settlements through a bank selected for that purpose.

It is the greatest embodiment of the "get-together" idea in banking circles. Through it the use of banking credit reaches its highest perfection and cash is reduced to its proper place in the economic scheme—the settler of balances. The New York Clearing-House has settled exchanges

amounting to \$2,509,034,041,053 in sixty-one years, with but \$117,797,140,257 in money. And so gradually has the clearing-house made its way into the banking scheme that it is difficult to trace the idea back to its origin.

The clearing-house, although originally intended as a simple arrangement to assist members in making a daily exchange of checks and settlement of balances, has gradually become the effective medium of coöperation among banks in all matters of mutual interest and in matters affecting the financial well-being of the community served. In the development of the movement, new functions have been added and each step has been taken with the idea of protecting its members and insuring banking and business stability. In each financial crisis clearing-houses have taken the initiative in suggesting and causing the members to adopt remedial measures in the interest of the banks and the general public.

ORIGIN OF THE CLEARING-HOUSE

The clearing principle dates back to about 1775, although before that time it is possible men balanced their affairs by an exchange of credit. The clearing-houses of old were the great periodical fairs, whither went merchants, great and small, bringing their "tallies" to settle their mutual debts and credits. "Justiciaries" were set over the fairs to hear and determine all commercial disputes, and to prove the "tallies" according to the commercial law, if the plaintiff desired this. These "tallies" were notched sticks of hazel-wood, split down the center, one part going to the debtor and the other to the creditor. The most famous of these fairs was that of St. Giles in Winchester, while probably the most famous in all Europe were those of Champagne and Brie in France, to which went merchants and bankers from all countries. Exchange booths were established and debts and credits were cleared to enormous amounts without the aid of a single coin.¹

Claim is made that as early as the fifteenth century the merchants of Naples had an arrangement for the clearing of claims. About 1773, in London, the collecting clerks connected with banking houses arranged, for their own con-

¹A. Mitchell Inness, "What is Money."

venience, to meet at an agreed point to exchange checks and items. The merchants and bankers recognized the saving of time and expense in having a convenient place to make exchanges and provided a building for the purpose. In this, the first clearing-house, the members had not only the advantage of a common meeting place, but they were able to make use of the clearing principle, which is the offsetting of debts and credits and the settlement of balances.

This system was soon followed in continental countries. In 1858, the London Clearing-House established a department for the collection of country checks. The problem in the European countries is somewhat different from ours. There the banking is highly centralized. In England, for instance, there are but few banks, but the banks have hundreds of branches scattered throughout the country, the activities, however, centering in London. Each bank is really a clearing-house in itself, at least of credit and trade information.

The London Clearing-House has but few members, but the banks with their numerous branches represent a large portion of the banking power of England. The clearing-house itself is a wonderful institution, existing primarily for the exchange of checks. There are two clearings a day, balances being settled by drafts on the Bank of England.

In the United States the first suggestion in regard to clearing-houses was made by Albert Gallatin in 1831. In 1853 the bank messengers in New York were in the habit of meeting at a point in Wall Street to exchange checks and notes. As in the case of the London clerks, this arrangement was for convenience. The necessity was recognized by the bankers and on November 11, 1853, representatives of fifty-two banks met and adopted a plan for the daily clearing of checks and settlement of balances and a building was provided for the purpose. The action of the New York bankers was followed in Boston in 1856, Philadelphia in 1858, Chicago 1865, St. Louis 1868 and at other points, until to-day there are about one hundred and eighty-two regularly organized clearing-house associations. In about fifty other localities clearing arrangements exist.

How effectively the clearing-house obviates the use of money will be seen from the fact that a Boston bank sent to the Boston Clearing-House checks to the amount of \$11,-

000,000 and had a debit balance of only \$2,800.49. At another time it settled a debit against it of \$6,180,000 with \$167.31. The largest daily transactions in the New York Clearing-House were those of November 3, 1909, the exchanges being \$736,461,548.70 and the balances \$27,672,-393.74. The largest balances were of July 2, 1914, \$50,-231,026.24. The largest average daily clearings were in 1906, \$342,422,772.57.² The largest debit balance paid by any one institution to the New York Clearing-House was for \$37,661,685.00 on October 3, 1905. The largest balance received by any member from the clearing-house was for \$34,086,068.54 on January 23, 1914. The smallest balance ever settled at the clearing-house was for \$0.01 on September 22, 1862. Seven millions on a credit sheet have been settled through the clearing-house for ten cents. The Boston City Bank has settled a day's clearings without having any balance, but these instances are rare.

THE LARGEST CHECK EVER PAID

The largest check on record was drawn by Kuhn, Loeb & Company on the National Bank of Commerce in payment for \$49,000,000 of four and one-half per cent. bonds recently sold to them by the Pennsylvania Railroad.

The check, which included accrued interest, was for \$49,-098,000. Two Pennsylvania officials came over from Philadelphia to receive it, and deposited it in the National Bank of Commerce to the credit of the railroad.

The principal transaction thus involved no actual money payment, but was accomplished by a book entry, the National Bank of Commerce charging the amount to one depositor and crediting it to the other.

For this reason there was no enormous balances at the clearing-house on account of this bond sale, as there was when payment was made by Kuhn, Loeb & Company and W. A. Read & Company for \$51,000,000 bonds of the State of New York a year ago, when \$34,000,000 in cash was taken away in one day by the Bank of the Manhattan Company.

Yesterday was not only the time set for Kuhn, Loeb &

²From 1914 report of New York Clearing House.

Company to pay for the bonds, but also for payment to be made to them by the individuals, insurance companies, savings banks, estates, or others who had subscribed for them when publicly offered by the bankers. These subscribers paid five per cent. of the amount subscribed for about two weeks ago and the balance due on the bonds awarded to them yesterday.

The issue was oversubscribed five times and in general the bidders got about eighteen per cent. of the amounts they sought, so that the five per cent. payment on their bids amounted to fully twenty-five per cent. of the total payments to be made, and the balances paid yesterday were less than seventy-five per cent.

GOES BACK TO ORIGINAL BANKS

In the aggregate these payments, including the first five per cent., were more than \$49,000,000. The payments were, therefore, \$50,715,000 and accrued interest. Most of these payments, including the checks received yesterday, were deposited by Kuhn, Loeb & Company in the National Bank of Commerce and constituted the bulk of the credit against which Kuhn, Loeb & Company drew the \$49,000,000 check. The Pennsylvania Railroad having deposited the check and established a credit of that amount in the bank, next drew a series of checks to distribute the amount among a number of banks.

The usual practice in these transactions is to distribute the proceeds among the banks on which the ultimate purchasers of the bonds drew their checks. This is done, of course, only as to substantial amounts, and other variations generally enter into the shifting of credits, but if the Pennsylvania adopted this course, and if it were carried out in every detail the net result would be that the Bank of Commerce would have no more and no less deposits on account of the bond sale at the end of the day than at the beginning, except for the profits of the sale. This also disregards the fact that the Bank of Commerce may have participated as a member of the syndicate and simply considers it as the intermediary through which the payments were effected.

In that case the checks drawn by the purchasers of the bonds on various institutions would be offset in the clearings

to-day by checks drawn on the Bank of Commerce and deposited in the various institutions, just as the big check was offset by its own deposit. The whole process would result in each institution charging the accounts of its depositors who were purchasers with the amounts of their checks and crediting the Pennsylvania Railroad with the same aggregate amount. While it is not supposed that the transactions were arranged with this exactitude, it is believed that roughly this is what took place, if the Pennsylvania followed the usual practice.⁸

VARIETIES OF CLEARING-HOUSES

Clearing-houses are of two kinds: Clearing-houses and clearing and supervision houses. The first kind merely clears the checks and collects and settles the balances in one way or another; the others not only clear the checks, but supervise the banks through examiners, fix the rates of exchange (see chapter eleven), interest paid on balances, and promulgate other stringent rules that must be adhered to under severe penalties. They are further classified into those which settle their balances in cash or its equivalent—the clearing-house certificate, or due bill, and those which settle their differences by draft.

The term “clearing-house” has reference to the association more than to the institution, although it is easier to conceive of a “house” being a finely adorned palace than a mere meeting place.

Trade being to a considerable extent local, it is but natural that a large part of the checks received through the receiving teller's window should be on banks in the neighborhood, and these are collected through the clearing-house together with items received by the bank from its correspondents for collection. While the methods of settling balances differ in localities, they are all based on the one idea to pay only the balance. Not only are checks paid thus, but drafts, notes falling due, certificates and cash instruments in general are also cleared by having them properly accepted and made payable through the clearings.

The territory served by the clearing-house is usually local, being confined to the limits of a city; but a few, no-

tably the Boston and the Kansas City Clearing-Houses, cover a wide territory and act as the clearing medium for hundreds of banks. (See chapter eleven.)

CLEARING-HOUSE TERMS AND INSTRUMENTS

It would naturally be inferred that the term "payable through the clearing-house" meant physically passing the instrument through the building, while in practice it merely means to pass through a process of "clearing." And this "clearing" simply means that the checks of one bank are settled by an exchange of checks on the other. Checks are often drawn payable through the clearing-house only, and this in times of stress obviates the use of money over the bank's counters, and prevents the crowd from gathering in the lobby. Such restrictions were largely used in 1907. To "clear" a check is to take it to the clearing-house, clearing-room or bank, and there exchange it for another check, paying the difference in cash. "Clearing-house exchanges" means simply the checks and the amount thereof on hand, which will be offered for "clearing" through the clearing-house. The "clearing-house balance" means, in the nomenclature of banking, the amount that the bank owes or has due to it from the members of the clearing-house. "Clearing-house certificates" are certificates issued by the clearing-house for gold deposited in its vaults. These certificates are essentially cash, and so regarded in settlements and in figuring the reserve. They are issued in large denominations—\$5,000 and \$10,000—and are good only between banks. About one-quarter of the 182 clearing-houses of the country use these certificates, about forty per cent. settling by draft on other cities.

The "clearing-house due bill" is given for items not cleared for some reason, or given in lieu of certification, as a cashier's check, or for use in payment of notes or other obligations where cash is demanded. They are also used to pay balances under \$5,000. They are payable only through the clearing-house the day after issue. These due bills are deposited by the manager to his credit in a member bank and checked against in favor of creditor banks.

"Clearing-house loan certificates" are used in time of financial stringency to dispense with the use of cash. They

were first issued in 1860, and in 1861, 1863, 1884, 1890, 1907 and 1914. They are secured by deposit of stocks and bonds and commercial paper and release that much cash for other purposes. High interest is charged the bank obtaining them and they are, therefore, retired as soon as their usefulness is over. In some places they have been issued in denominations small enough to circulate as money, and were to all intents and purposes an asset currency. In New York they have never passed current except between banks. On account of the interest that follows, banks will not allow them to remain out longer than the conditions warrant. In times of panic the "loan committee" performs a very important function in its morning meetings, when it passes upon the collateral offered as security for these clearing-house certificates, the usual margin being twenty-five per cent. The collateral is pledged with the clearing-house with power to collect and sell if the certificates are not paid. The collateral consists of stocks, bonds and commercial paper, the latter predominating.

In order to understand the magnitude of the work that leads up to the morning's clearings, we shall need to go back to the receiving teller's department. A pen picture of this work is here presented as typical of a large New York bank. At this desk the half-dozen tellers are busily engaged all day receiving the deposits. These deposits range from petty sums up to millions. To handle the many millions of dollars deposited each day requires not only a large force of men, but necessitates a division of the work, so that a proof can be made within a reasonable time. In this particular bank the receiving teller has sub-divided his department into three parts—the main department, of which he takes immediate charge; the special department, in charge of an assistant, and the annex, in charge of another assistant. Up to two o'clock, as fast as the teller receives the deposits, they are turned over to the special department. This special department has a force of ten to twelve experienced men. Four checkers are the first to receive the deposits. Each man takes a deposit, checks it, putting on the deposit slip the clearing-house number of the bank on which the check is drawn, the letter "C" if it is a cash item, or "S. D." if it is a sight draft. This is done so that in case any question comes up relating to the deposit or the check, the item or items could

easily be located. After the checking process the items are given to two men who put the "Paid" stamp on them. When the stampers turn the checks over to the sorters, it is the duty of this force to sort the checks into the boxes marked with the names of the banks on which the checks are drawn. This work finished, the machine men come into play. Each man has a number of boxes (representing so many banks) assigned to him, and his duty is to list the checks drawn on each bank. For instance, he has checks drawn on No. 8 (National City Bank). He lists them, puts them aside and continues this operation with the numerous checks until the time arrives for the closing of this department, which is two o'clock, when they make their proof.

Then the annex is called into action, when what is probably the busiest part of the receiving teller's day begins, for it is at this time that the brokers and trust companies hand in their deposits. There are times when it is a very ordinary occurrence for deposit tickets yards in length to be received, and upon the annex devolves the duty of getting them out of the way. A large force takes hold of this work, and at half-past four they are ready to strike a proof.

While the annex is working its way out, the main division is busily engaged in taking care of the deposits that go to the credit of individual depositors.

Each sub-division makes its own credits, and, after the checks are all taken care of, they make a separate proof. If all three divisions prove, the receiving teller and his active men are disengaged until the following day. We now have the receiving teller proved, and having charged the total of his exchanges over to the night force. This force is composed of fourteen men, who arrive at the bank at midnight. Along with this force comes the mail, with its out-of-town checks and drafts that go to make up the credits of the hundreds of banks and trust companies that do business with this institution.

The night force, using the letters as credits, handle the checks in about the same manner as described in the receiving teller's work. A second mail is received at three A. M. and again another one at seven o'clock. If, by chance, the night force has not proved when eight o'clock arrives, they go, the difference being turned over to the main department. This department now takes hold of the machinery of the

bank. For general activity the mail department is in a class by itself. Here is where the reserves of the bank are called into action. One hundred and twenty-five men are at the disposal of a clear-headed individual, upon whom rests the responsibility of getting in shape to be cleared the many millions of dollars in checks that must be ready at 9.45. At this time the captain is given control. He places every man at his station. Each one knows what his particular duties are, and when 9.30 arrives and the captain orders "all in," the general proof begins. The total of the slips are listed on the envelopes printed with the name of the bank upon which the checks are drawn, and the totals of the envelopes are called off, being listed by two men; one taking down the amount in the long book and the other on the clearing-house sheet. If the totals of the long book and the sheet prove, the settling clerk goes to the clearing-house. The clearing clerk, with his assistants, now loses no time in getting the boxes, containing probably forty-five to fifty thousand checks, and representing millions in money, also to the clearing-house.⁴

THE CLEARING PROCESS

The clearing process is simple: All checks to go through the clearing-house are sorted into batches representing the various banks and those for whom they clear. The amounts are carried to a "clearing-house settling sheet," which contains the names of all the clearing-house members. The amount set opposite each name is the total of the checks enclosed in an envelope, and which the presenting bank will collect from the other bank through the clearing-house. The total of these envelopes is its total credit with the clearing-house, and the difference between the amounts of the checks it brings and the checks it receives, its debit or credit balance as the case may be.

A credit ticket is made out showing the amount due from each bank to the bank presenting. (Clearing-house banks are known by numbers among the clerks, it being uncommon to use the title of the bank. Thus, the National Park Bank will always be referred to as "54".) There is also a column on the settling sheet for the amounts which will be presented

⁴A. M. Barrett in the Bankers Magazine.

against the bank, and for these amounts it must, through the clearing-house, settle with the other banks. Thus, if the First National Bank owes the various banks of the clearing-house \$500,000, as shown by one column, and has due to it \$300,000, as shown by the other, it would owe the banks as a whole \$200,000, which it would settle, not by paying them, but by paying the clearing-house, the clearing-house in turn paying the various banks. While one bank might owe another, it might still have a balance due it from the banks as a whole. In other words, the banks all pay to the clearing-house the amount they owe and the clearing-house distributes the amount among those to whom it is due.

New York Clearing House	No. 107.	New York Clearing House.
		191
	Debit Guaranty Trust Company of N. Y., Amt. rec'd, \$	
	Credit	Brought, \$
	\$ Debit Balance Due Clearing House	
	Cr. Bal. Due Guaranty Trust Company of N. Y., \$	
		Settling Clerk.

CLEARING-HOUSE DEBIT TICKET

When the sheet is ready for the clearing-house it is given to the settling clerk, who must be a rapid and accurate worker, and who is accompanied by a delivery clerk. The checks of some of the New York banks are so numerous that it sometimes requires two men to carry the leather case used for clearing-house settlements.

The envelopes are arranged consecutively and the delivery clerk has the checks and a duplicate of the settling sheet with the entries made thereon. On this sheet the other clerks will receipt for the amounts when delivered to them. The clearing-house manager has a list of banks with provision for entering the amount due to and from each bank, these figures being obtained from the slips sent up by the settling clerk upon his arrival.

Each bank has a desk behind which sits the settling clerk. The delivery clerk stands in front. One minute before the clearing begins, the bell is sounded as a signal to get ready. On the tick of the clock it is sounded again and the line be-

No. 107

Guaranty Trust Company of New York

Delivery Clerk's Statements

No.	BANKS	AMOUNT BROUGHT				RECEIVED BY			
1	Bank of N. Y., Nat'l Bk'g Ass'n					1			
2	Bank of the Manhattan Company					2			
3	Merchants' National Bank					3			
4	Mechanics & Metals Nat'l Bank					4			
6	Bank of America					6			
8	National City Bank					8			
12	Chemical National Bank					12			
13	Merchants' Exchange Nat'l Bank					13			
15	Nat'l Butchers' & Drovers' Bank					15			
17	Greenwich Bank					17			
21	American Exchange Nat'l Bank					21			
23	National Bank of Commerce					23			
28	Pacific Bank					28			
30	Chatham & Phenix Nat'l Bank					30			
31	People's Bank					31			
33	Hanover National Bank					33			

No. 107

Guaranty Trust Company of New York

Settling Clerk's Statements

No.	BANKS	AMOUNT BROUGHT				RECEIVED BY			
1	Bank of N. Y., Nat'l Bk'g Ass'n					1			
2	Bank of the Manhattan Company					2			
3	Merchants' National Bank					3			
4	Mechanics & Metals Nat'l Bank					4			
6	Bank of America					6			
8	National City Bank					8			
12	Chemical National Bank					12			
13	Merchants' Exchange Nat'l Bank					13			
15	Nat'l Butchers' & Drovers' Bank					15			
17	Greenwich Bank					17			
21	American Exchange Nat'l Bank					21			
23	National Bank of Commerce					23			
28	Pacific Bank					28			
30	Chatham & Phenix Nat'l Bank					30			
31	People's Bank					31			
33	Hanover National Bank					33			

DELIVERY CLERK'S AND SETTLING CLERK'S CLEARING-HOUSE STATEMENTS

gins to move. The delivery clerk hands in his envelope, with a ticket showing the amount, from whom it came and to whom it goes. The clerk behind the desk enters upon his sheet the amount shown on the envelope as a credit to the bank from which it comes. His assistant initials the duplicate sheet as a receipt for the items. In the meantime the

delivery clerk has deposited a package at the next desk, dropped the ticket and taken the sheet from the first desk.

When the delivery clerk has completed his rounds he will be before his own desk, and will have delivered all his checks. The settling clerk will have received all packages against his bank, and the whole process will have taken less than ten minutes. The sheet of the delivery clerk will be fully receipted for all items delivered, and the settling clerk will have received all items against his bank, which he must list and total to ascertain whether the balance is for or against him. The delivery clerk counts the number of packages, compares them with the figures made by the settling clerk on his sheet and if found correct takes them to the bank. The settling clerk remains to make the proof.

He totals the figures and the result shows whether the bank owes the clearing-house (a debit balance) or has an amount due it (credit balance) and this balance is sent to the manager. The amount brought, the amount received and the difference are listed and sent to the clearing-house proof clerk. The proof clerk has made similar entries from the tickets sent up to him, and the result of the work of the men on the floor must agree with the result he has obtained by another process. Forty-five minutes are allowed for the proof and there is a fine for delay. After 11.30 the fines are doubled. The longest session in the New York Clearing-House was caused by a difference of ten cents. The author has seen three hundred million "cleared" in the above process in six minutes. The amounts due to and from the various banks are then called off in even thousands by the manager and taken down for the information of the banks.

SETTLING THE BALANCES

The amounts due and receivable must now be adjusted. It is apparent that in so short a time the bank cannot stop to examine the checks to ascertain if they are good or not, regularly indorsed, payment stopped, or returnable for some other reason. By the rules of the clearing-house such adjustments are made after the clearing has been done. The bank pays for what is shown on the envelope and receives pay for what it turns in and makes adjustments afterward between the banks individually.

No. 107

Guaranty Trust Company of New York

CLEARING HOUSE BALANCES

191__

BANKS	No.	DR. Thousands	CR. Thousands
Bank of N. Y., Nat'l B'k'g Ass'n	1		
Bank of the Manhattan Company	2		
Merchants' National Bank	3		
Mechanics & Metals Nat'l Bank	4		
Bank of America	6		
National City Bank	8		
Chemical National Bank	12		
Merchants' Exchange Nat'l Bank	13		
Nat'l Butchers' & Drovers' Bank	15		
Greenwich Bank	17		
American Exchange Nat'l Bank	21		
National Bank of Commerce	23		
Pacific Bank	28		
Chatham & Phenix Nat'l Bank	30		
People's Bank	31		
Hanover National Bank	33		
Citizens Central Nat'l Bank	36		
National Nassau Bank	40		
Market & Fulton National Bank	42		
Metropolitan Bank	44		
Corn Exchange Bank	45		

CLEARING-HOUSE BALANCES ARE CALLED OFF BY THE MANAGER AND TAKEN DOWN ON
THESE SHEETS FOR THE BANKS' INFORMATION

By the rules of the clearing-house all checks to be returned must be sent to the bank from which they were received by a certain hour, and the drawee bank must, therefore, determine promptly whether or not the check is to be paid. It is generally the function of the bookkeeping department to ascertain if the maker is good for the amount, leaving it to the paying teller to pass upon the regularity

of the check as to signature, etc. But someone in the bank must, in a few hours, pass upon all checks that come through the clearing, and failure to detect the bad will lead to loss; for the rules are rigid and binding, and a check not returned before the stipulated time may be considered paid. The courts have steadily recognized this rule as fair, although leading to hardship at times.

In New York, every bank having a balance due to the clearing-house must pay the same between 12.30 and 1.30, and this payment must be in form suitable for reserves, including the clearing-house gold certificates above mentioned. A large part of the settlements are made with these certificates which are in large denomination and are used only in clearing-house settlements. Legal tender money, gold and gold certificates are also used. Banks having balances due to them are required to appear at 1.30 and receive the amount. These balances are paid over by the manager and receipted for. The clearing-house day thus closes as it began, with nothing "in the till"—all that came in having been paid out. The medium of settlement may be different in different places, legal tender money always, of course, being acceptable.

CLEARING-HOUSE SETTLEMENTS

Settlements may be made in one of seven ways: (a) By checks on debtor banks, given to creditor banks and issued by the clearing-house manager; (b) by borrowing and loaning balances (a bank instead of taking its balance makes a loan of it to another bank on interest); (c) by the clearing-house certificates; (d) by drafts on another city; (e) by the clearing-house loan certificates; (f) by cash; (g) by the clearing-house "due bill," which is an evidence of debt payable through the clearing-house only, and which obviates the use of cash and the identification of the messenger. They are payable through the next day's clearing. Where managers' checks are used they are given to creditor banks, and included in the clearings of the next day.

Some clearing-houses make two clearings a day, one for over-the-counter items of the day before and the other for mail and other items received too late for the first clearing. In New York there is but one clearing, at ten o'clock. The

items received through the bank windows are often listed separately, and the items received in the mails added afterward, making two columns which are totaled for the clearing.

In smaller cities the clearings are much more simple than obtains in New York and are often performed through a bank, the banks taking turns as clearing agent. In such cases all checks will be sent to the bank with slips to indicate the amount, and the bank, acting as the clearing-house, will make the same adjustments as in large cities, receiving from the debtor banks their drafts on New York, and paying the creditor banks by its own draft on New York, which settles all the day's dealings. The clearing process under the latter method may look no more formal than cashing a check, while in New York it looks like the movement of a finely organized piece of machinery.

The number of items passing through the New York Clearing-House is estimated at about 500,000 daily, and the work that precedes the clearing can easily be understood.

OTHER CLEARING-HOUSE ACTIVITIES

All clearing-houses exercise the clearing function and under necessity issue certificates, but all do not exercise the supervisory functions that have been mentioned, especially in regard to the examinations. Clearing-house examinations are merely examinations under the supervision of the clearing-house, usually by appointed examiners, and these examinations, by reason of the fact that the examiner is not hurried and has fewer banks to examine than the general run of examiners, are on a high plane of excellence; and as a credit man the examiner may be in closer touch with the borrowers of a single community than with those in a wide territory, and can give much valuable aid in his advisory capacity. Chicago and New York both have highly paid examiners.

Clearing-house administration carries with it the coöperation of the banks in times of stress, the concerted action and the wisdom of the leaders of the banking world, who can, by united action, avoid disaster by their power to pull together, the strong helping the weak.

The clearing-house has come to fulfill other important

functions as a regulating force, namely, regulating exchange charges, uniform interest rates, and the observance of ethical principles in the matter of advertising. The competition of banks for business has led to the payment of excessive interest on deposits, to the collection of checks free, and other concessions that have unsettled the banking business, and brought all banks into competition that has proven unhealthy. By an agreement which is binding under penalty, uniformity and fairness have been established.

Several attempts have been made to establish clearing-house bureaus of credit, where credit information could be assembled, classified and disseminated, but thus far nothing has come of it. Other regulations include the indorsement of checks and drafts, certification, return of paper unpaid and other details of management that work for the good of the whole.

CLEARINGS FOR NON-MEMBERS

Banks which are not members of the clearing-house may have the privilege of its machinery by clearing through other banks, by which is meant, for instance, that if the First National Bank is a member and the Second National Bank is not (there is no compulsion as to membership, and some banks will not join on account of the rigid rules enforced as to reserves, examinations and the costs attending), items on the Second National will be sent to the First National (its clearing agent) and all payments to the Second National will be made to the First National for its account. The fee in New York is \$1,000 a year for this privilege.

Thus, many banks in Brooklyn clear through New York banks by such an arrangement, and the clerks must know what bank acts for another in the classification of checks for the clearing. The clearing bank is responsible for all checks upon banks for which it clears. In the panic of 1907 one of the first signs of danger was the notice published by a clearing agent that it would no longer clear for a certain bank, and this meant that it considered the bank unsound, and precipitated the crisis. The simplest arrangement is for the non-member bank to keep account with the member bank, depositing all its checks in the clearing-house district with the clearing agent, and to which all checks drawn on it will be charged.

Clearing-house rules are very strict and rigidly enforced. Everything is done on the dot, and fines imposed for offenses, as, for instance, for listing a check on the wrong bank, tardiness, both in presenting checks for clearing and for delay and errors in making totals, and in making settlements. The fines in the New York Clearing-House for errors are as follows: Errors on credit side of settling clerk's sheet, \$3; errors on debit side of settling clerk's sheet, \$2; errors in tickets, \$2; errors in footing amount received, \$1; disorderly conduct, \$2; tardiness, \$2; debtor bank failing to pay before 1.30, \$3; errors in delivery on receipt of exchanges, \$1. These fines are charged to the guilty banks and statement rendered.

CLEARING COUNTRY CHECKS

As the clearing-house settles the balances of city checks—in reality collecting them—so clearing-houses may act as clearing agencies for wider territory, the principle being the same. The operation of the Boston Clearing-House will illustrate this principle.

Each Boston Clearing-House bank assorts its New England checks into States and towns and sends them daily to the clearing-house, before a certain hour, together with machine lists of the totals, for which a receipt is taken. This receipt is then cleared after a certain time has elapsed for the return of the remittances. The clearing-house clerks assort all the checks alphabetically as to towns and States so that at the end of the day a single letter containing checks from all the Boston banks goes to each bank in New England. Remittance is made at once to the manager of the clearing-house who then charges the drafts to the banks on which they are drawn. If other funds than Boston drafts are received, due provision is made. Ninety-five per cent. of all transactions are thus settled on the second day and if any delay should occur in the mails for a longer period, temporary adjustment is made. The clerical work and book-keeping entailed is very simple and altogether the plan has been so eminently successful that many other cities have adopted similar systems. The cost to the Boston banks has been about seven cents per thousand dollars collected.

The Kansas City Clearing-House collects for a wider

territory, and this will be found described in the chapter on checks and their collection (chapter eleven).

THE WEEKLY REPORT

The activities of the clearing-house are many, but one of the chief benefits is the weekly report of condition, by which the standing of the banks as individuals and the banks of a clearing-house district, as a whole, may be accurately known. The average condition is reported for the week, and also the actual condition as of the close of the week. These figures are published for the benefit of the public. Banks keep a record of the figures each day for averaging at the close of the week. The total clearings of the clearing-houses, of course, indicate the state of trade, but they do not include those clearings made inside the banks, and a falling off in clearings need not necessarily indicate slack business. Thus, if two large banks were to unite, they would no longer clear the checks on each other, but perform the clearing within their own organization as debits and credits to individual accounts, and the clearings might show a falling off, and the volume of business still be normal.

Statistics are kept by all clearing-houses, and these are fairly indicative of the condition of business for the country. The volume of clearings measures, to a large extent, the volume of business, and is a direct public service. The varying condition of the banks is also known by these reports, and together with the examinations already referred to, give the banking world information that is most beneficial to the interest of all concerned. Weaknesses are detected in time to lend support; unwise methods and unjust practices are discovered; fraud detected; inflation and misuse of bank funds are checked; so that the clearing-house becomes a highly valuable regulating force in the community.

CHAPTER VIII.

COLLECTIONS AND THE MESSENGER

Collection items are to be distinguished from transit items, in that transit items are credited as cash, and collected, while collection items are received for collection and credit. Transit items (usually checks) are treated as cash; the others are not until cash or its equivalent is received for them. Collections consist of notes, drafts, bills of exchange, coupons, etc., which have stated maturity, or for some reason are not to be treated as paid until proceeds are in hand.

Collection items may be divided into two groups: Those to be collected through messengers and those to be collected through the mails, using for that purpose the bank's regular correspondents, or a correspondent selected for the purpose. Items will be received from the bank's correspondents to be collected either in person or to be forwarded, and items will be deposited by the bank's own customers for like purpose. There will also be items held by the bank maturing from day to day that must be presented in person for collection, and the messenger, therefore, comes into play as the medium through which to make presentment and collection.

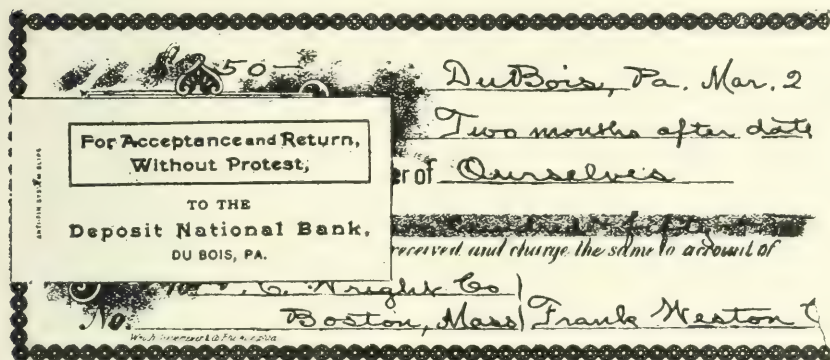
THE MESSENGER

Even though the messenger stands well toward the bottom of the banking ladder, he is an important part of its machinery. He is charged with simple, yet important, duties. His every act is surrounded by banking law and precedents. It is of utmost importance that he be guided into proper methods in this respect, and upon his superior officer falls the duty of directing him aright. Inasmuch as he is a novice, he will simply do as he is told, and the directing officer must know what to do under many conditions in order to keep the bank, himself and the messenger within the line of duty, good banking law and practice.

The messenger is usually a beginner in the banking business, and is sometimes called a "runner"—not because he runs, but because he is on foot most of the time, and should

always make haste, if he does not run, for time is an element. The messenger is in the first stage of "the bank man in the making," and here he learns his first lessons in banking. He is "green" and can do, or ought to do, only as he is told, and the banker who can direct the messenger in proper methods and keep him within the lawful rights of the bank and see that he does the proper thing at the proper time, is a good executive.

The messenger should have all the qualities that the bank man of the future would be expected to have. He must have good health. Every bank man should have good health, and a sickly messenger is out of place. He should



TIME DRAFT FOR ACCEPTANCE AND RETURN

have good home training. He should, if possible, live at home. He is generally at the period of life when impressions are made and habits formed that will make or mar his career as a bank man, and it is vital that home influences be good, for his associations will be with all classes of boys and men. He should be neat in person. It should be insisted upon that he have clean hands and nails, use the tooth brush, and generally keep himself tidy. He should have at least a grammar school education, be a fair penman, and have an aptitude for bank work. This can soon be determined, for if he is a round boy in a square hole, you don't want him. He must fit.

To say that the messenger must be honest is to waste time. All men should be; but honesty being sometimes an ethical conclusion, what is honesty is often a matter of dispute. He should have a high regard for other people's

property. There are some men who cannot resist the sight of money. It is told of a certain bank clerk that the mere sight of money in mass sets him trembling. Such a man is not safe in a bank. The boy who would take a postage stamp without consent is treading dangerous ground. He may never go further, and yet he may not be satisfied with postage stamps, and the environment of money, the ease with which the officials earn it might tempt him to find a way or make one, and the old story repeats itself.

THE MESSENGER AND HIS VALUABLES

The messenger should early learn to comprehend the value of the paper he will carry with him. He must be

NO PROTEST TEAR THIS OFF BEFORE PRESENTING

\$500 *Philadelphia, May 23*
On Demand

DO NOT HOLD THIS DRAFT
 FOR CONVENIENCE OF DRAWEE.
 IF NOT PAID ON PRESENTA-
 TION RETURN AT ONCE WITH
 REASON TO

MANUFACTURERS NATIONAL BANK
 PHILADELPHIA, PA.

Manufacturers Natl Bank

Pay to the order of
Grace Shipping Co
Chicago

Pay the same to account
A Boatmen

DEMAND DRAFT

careful. He will take out with him checks, notes, bills of exchange, securities, coupons and all sorts of valuable papers, for which he must account, and if no monetary loss occurs, it will be difficult and sometimes impossible to replace them if lost. He is, therefore, usually provided with a stout wallet, with a good clasp, and with a chain encased in leather which goes around the body or wrist, to prevent loss or robbery. He should use it that way: but many messengers have, after a time, grown careless in such matters and taken long chances.

To repeat, the messenger's principal duties consist in doing as he is told. He should not assume responsibilities. He should be sent out with explicit instructions as what to

do and be held to them. He should not take in payment of items anything but cash or certified checks. While the course of business runs smoothly, it may make little difference whether a New York draft, a check or currency is received in payment, either by a messenger or by a collecting bank; but in the event of failure of the bank making the collection, or the bank on which the instrument received in payment is drawn, questions of law arise that the collecting bank is bound to know. To discuss the question here would lead to endless quotations from courts of record all over the country and the reader interested in following this subject further is referred to works on banking law and legal publications that treat of such matters from a strictly legal viewpoint.

OLD EMPLOYEES

The messenger is sometimes an old employee who has served his day at high pressure work and been given the rather simple occupation of messenger; or from disappointment or incompetency in the field of other endeavor has become, for some reason or other, incapacitated for higher grade work and taken this as a last resort. Some of the tragedies of banking have culminated in the messenger, and if we could scratch beneath the surface—cut deep enough—we would find many a broken-hearted man under the messenger's coat.

In a large city, where much territory has to be covered, there will, of course, be various routes laid out, covering the maximum ground with the least waste of time and retracing of steps. Inasmuch as banks have to present various items not handled through the clearing-house over the counters direct, these routes are often laid out with respect to covering the various banking institutions of the city, and as occasion requires the route is varied to include other places.

MEETING MEN

In making collections the messenger will meet all sorts of men, in all sorts of occupations, and receive all sorts of treatment, but it is a good schooling—this meeting of men—and chapters might be written thereon; and those inter-

Guaranty Trust Company of New York

140 Broadway

M. _____

A. _____

for \$ _____ drawn by

_____ has been regularly presented at your office
for payment. It will be held by Collection Department until 3 o'clock this day.

WM. C. EDWARDS, Treasurer.

New York _____

by _____

NOTICE LEFT BY MESSENGER WHEN DRAWEE IS NOT FOUND

another bank is in existence in the same town, and not knowing the law involve his bank in loss.

He can make no better use of his spare time than to study case law; for what happened in one bank may happen in another; and case law being simply the result of errors made, he can avoid the same errors by knowing the result of other like errors. There are many cases arising out of collections. By being a thoughtful collection man he can not only make money for his bank, but save money for it, and it is as important to avoid losses as it is to make profits.

A LITTLE OF THE LAW OF COLLECTIONS

The collection of a note is governed by law so strict that careful attention must be given the timing, the presentation, the protest and the notice of protest, and the form of money that is accepted in payment. The law does not recognize

Clearfield, Pa. Mar
Three days after sig
ter of Clearfield National

DO NOT PROTEST THIS ITEM.
Please remove this slip from the item before it is presented for payment.

If not paid, return at once, with reason, to
THE CLEARFIELD NATIONAL BANK,
CLEARFIELD, PA.

T. J. Collector Co
No. _____ New York } *Clearfield Mfg.*

received and charge the same to account of

TIME DRAFT "NO PROTEST"

payment in any other form than cash, but the custom among the New York banks is to accept a certified check on a clearing-house bank drawn to the order of the collecting bank: or if drawn to a third party and duly indorsed, the indorsement must be known to the bank which accepts it.

Briefly stated, the law in regard to presentation is that a note must be presented at the place where it is made payable, if such a place is named. If not stated, at the maker's place of business, if known, or at his residence or at any place where he may be found on the day of maturity. Banking customs make the hours from 10 A. M. to 3 P. M., but it is often very convenient to fall back on the law which permits the presentation at a later hour when the occasion requires. In protesting a note which bears an indorser it is absolutely necessary that it be presented by a notary public of record on the day the note falls due, and that notices of such protest be sent to all parties concerned and such notices must be mailed by an early mail on the day following. This protest holds all the indorsers in turn, but it is not necessary to protest to hold the maker, although it is best to have a note protested, as it is a sworn statement beyond dispute in case of a suit that the note was presented and refused at the place of payment on the due date.

By the Negotiable Instruments Law in force in forty-six States and territories, protest is necessary only on foreign bills of exchange—checks, notes and bills drawn in one State and payable in another; but as a common banking practice protest is made of all instruments that are not paid.

The purpose of protest is to hold the indorsers, for unless protest is properly made the indorsers are discharged. And when properly protested the paper needs no other evidence in court as to having been presented for payment. To be on the safe side some banks protest all paper that is unpaid, unless specifically instructed to the contrary. But before protest is made, all due effort should be made to reach the party on whom drawn and be certain that payment has been refused before resorting to protest. Protest of checks is, of course, a common matter, and presentment to the bank drawn on and refusal to pay is all that is necessary to make protest warranted.

SENDING COLLECTIONS DIRECTLY TO DRAWEE BANKS¹

1. *Collecting Bank Guilty of Negligence in Sending Check to Drawee.*—In the collection of checks deposited with it a bank frequently finds it convenient, if not necessary, to send them directly to the banks on which they are drawn. The collecting bank may have no correspondent at the place where the drawee of a check, deposited with it for collection, is located. The drawee bank may, in fact, be the only bank at that place. The collection of a check through the medium of intermediate or correspondent banks might involve sending the check over a circuitous course, which, in addition to consuming time might actually jeopardize the chances of successful collection. Exchange charges sometimes influence the bank as to the manner in which the collection is conducted. These and other considerations, in the eyes of the banker, are often deemed sufficient reason for collecting a check, placed with him by a depositor, by sending the check directly to the drawee bank.

There are undoubtedly many instances in which a banker would consider any other method of collection opposed to good banking. But, in the making of such collections, the banker must take into consideration the fact that the courts have evolved certain rules of law, by which to determine who shall bear the loss, when a loss occurs in the collection of a check. And these rules sometimes conflict with the banker's idea of the proper way to collect a check.

The courts lay down the rule that, where a bank receives a check for collection, and through its negligence the check is not collected, it is responsible for the amount of the loss to the owner of the check. No one can doubt the soundness of this doctrine. The courts go further and declare that the sending of a check by a collecting bank directly to the bank on which it is drawn amounts to negligence and renders the collecting bank liable to its depositor in the event that the collection is not made. Bankers may doubt the fairness, as well as the soundness, of this doctrine. But the rule is so well established in this country that time spent in doubting it in any manner is wasted.

With the exception of New York, every State in which the question has arisen has held that the sending of a check

¹John Edson Brady in the April, 1914, Banking Law Journal.

directly to the drawee bank is negligence on the part of the collecting bank. As the courts see the situation, the loss in such a case usually occurs because the drawee bank sends its own paper in payment of the check and fails before the

No. 2. 1750		Philadelphia June 3	
Please advise payment or non-payment by telegraph, ~~telephone~~ , mail, as soon as paid or refused — to		National	
Bank of Montclair, MONTCLAIR, N. J.		North 3d Street	
one hundred & ten		T. Newberke	
\$110 ⁵⁰ / ₁₀₀		R. W. Chase	
		Cheque of Eastern Bank	

ITEM FOR COLLECTION WITH INSTRUCTIONS TO "WIRE NON-PAYMENT"

same is presented for payment; if the check had been sent to a correspondent bank, it might have been presented before the failure of the drawee, paid in cash, and remitted for by the correspondent. It matters not that loss might also occur, even by making the collection through a correspondent; this does not enter into the question.

The rule, which makes it negligent for a collecting bank to send a check directly to the bank on which it is drawn, is generally placed on the ground that, in so doing, the collecting bank makes the debtor an agent for the purpose of collecting the debt.

The reason is expressed as follows in the case of *German National Bank v. Burns*, 12 Colo. 539: "Even if we can conceive of such an anomaly as one bank acting as the agent of another to make a collection against itself, it must be apparent that the selection of such an agent is not sanctioned by businesslike prudence and discretion. How can the debtor be the proper agent of the creditor in the very matter of collecting the debt? His interests are all adverse to those of the principal. If the debtor is embarrassed, there is the temptation to delay; if wanting in integrity, there is the opportunity to destroy and deny the evidence of the indebtedness."

The following cases support the rule that it is negligence for a bank to send a check, entrusted to it for collection, directly to the drawee and indicate how firmly the rule is fixed: *Lowenstein v. Bresler*, 109 Ala. 326; *German National Bank v. Burns*, 12 Colo. 539; *Drovers' National Bank v. Anglo-American Packing and Provisions Company*, 117 Ill. 100; *Anderson v. Rodgers*, 53 Kans. 542; *First National Bank v. Citizens' Savings Bank*, 123 Mich. 336; *Minneapolis Sash and Door Company v. Metropolitan Bank*, 76 Minn. 136; *American Exchange National Bank v. Metropolitan National Bank*, 71 Mo. App. 451; *Western Wheeled Scraper Company v. Sadilek*, 50 Neb. 105; *National Bank v. Johnson*, 6 N. D. 180; *Wagner v. Crook*, 167 Pa. 259; *Hazlett v. Commercial National Bank*, 132 Pa. 118; *Harvey v. Girard National Bank*, 119 Pa. 212; *Merchants' National Bank v. Goodman*, 109 Pa. 422; *Givan v. Bank of Alexandria, Tenn.*, 52 S. W. Rep. 923; *Winchester Milling Company v. Bank of Winchester*, 120 Tenn. 225; *First National Bank v. City National Bank*, 12 Tex. Civ. App. 318; *First National Bank v. Fourth National Bank*, 56 Fed. Rep. 967; *Farwell v. Curtis*, 7 Biss. 160, Fed. Cas. No. 4, 690; *Jefferson County Savings Bank v. Hendrix*, 147 Ala. 670, 1 L. R. A., N. S., 246; *Farley National Bank v. Pollak & Bernheimer*, 145 Ala. 321; *Carson v. Fincher*, 129 Mich. 687; *Bank of Rocky Mount v. Floyd*, 142 N. C. 187.

In some of the cases the bank in which a check is de-

\$947 ⁵⁰		Philadelphia, Jan. 2	
On the 29 th day of April 1901		the order of A. L. Finne	
NO PROTEST. Kindly remove this slip before presenting item.			
If not paid when due, please return at once, with reason, to		ADVISE PAYMENT.	
THE FARMERS NATIONAL BANK, Rome, N. Y.		hundred & forty seven	
		Payable at First National without defalcation Value received.	
No.		S. S. Maser	

LITTON 1111 D. Stanton 304 Market St. Philadelphia

posited for collection escapes liability to the depositor for a loss resulting from sending the check directly to the drawee bank, by reason of another bank intervening between it and the drawee. That is, the initial bank, instead of mailing the check to the drawee, forwards it to a suitable correspondent bank, which in turn sends it to the drawee. The correspondent bank is then held to be the agent of the depositor and not of the forwarding bank, and the latter is not responsible for the default of the correspondent. *Givan v. Bank of Alexandria, Tenn.*, 52 S. W. Rep. 923, is a case of this kind. The plaintiff deposited in the defendant bank two checks on the bank of A. Byram & Company, of Watertown, Tenn. On the same day the defendant bank forwarded the checks to the First National Bank at Nashville. This bank sent the checks directly to the drawee bank, but they were never paid, because of the drawee's suspension.

Although the court stated that the Nashville bank was guilty of negligence in sending the checks directly to the drawee, it was held that the defendant bank was not liable for that default. The court said: "Assuming, then, that under the rules stated the check may be sent to the place of payment through intermediate banks, it follows, under the rule, that the initial bank discharges its duty to the person who deposits the check for collection if such intermediate bank or banks are suitable persons for the performance of the business; and, in event such proper selections are made, such intermediate bank or banks, down to the last one in the chain, become the agents of the owner of the paper, and responsible to him as such."

Many of the States hold, contrary to the rule here expressed, that the initial bank is liable to its depositor for losses occurring through the negligence or default of a correspondent bank, to which a check is sent for collection.

2. *The Rule in New York.*—The State of New York stands alone in this country in its opposition to the general rule, under which a bank is deemed guilty of negligence in sending a check directly to the bank on which it is drawn. But even in New York there is no decision of the highest court, deciding the question squarely.

The case of *McIntosh v. Tyler*, 47 Hun (N. Y.) 99, was an action by the payee of a check against its drawers.

The check was deposited by the plaintiff in a bank for collection, and the bank in which it was so deposited sent it directly to the bank on which it was drawn. The drawee bank charged the check to the drawer's account and stamped it paid. A draft on New York for the amount of the check was filled out, but was not signed and was subsequently destroyed. At the close of the day on which the drawee bank received the check it suspended business. It was held that the drawer was liable to the payee on the check, the court saying: "The fact that a check mailed by the holder to the drawee for payment is not paid, when it would have been had it been presented at the payee's counter, is not, it seems, in this State, a defense in favor of the drawer, though by the transaction the drawer lost his deposit, though it has been held otherwise."

While this was an action against the drawer of the check, brought by the payee, and not by the holder against a bank in which the check was deposited for collection, it has been generally accepted as an authority for the proposition that a bank in which a check is deposited for collection is not guilty of negligence in forwarding the check directly to the drawee for payment, and is not liable to the holder, by whom the check was deposited, for a loss occurring therefrom.

This New York decision is based on the authority of two earlier New York cases, *Indig v. National City Bank*, 80 N. Y. 100, and *Briggs v. Central National Bank*, 89 N. Y. 182. Referring to these cases it is said in a note in 27 L. R. A. 248: "Careful analysis of these New York cases, therefore, shows that there is no direct decision of the court of last resort upholding the practice of mailing checks directly to the drawee. On the contrary, there is a mere expression not necessary to the decision in the *Indig* case approving the practice of mailing a note to the bank at which it is payable, and a recital of this decision in the case of *Briggs v. Central National Bank*, 89 N. Y. 182, as if it were the case of a check mailed to the drawee. Therefore the decision of the general term of the supreme court (*McIntosh v. Tyler*, *supra*) denying the doctrine of the other States in reliance on the authority of these two cases is in itself the only direct authority in New York State to that effect. This decision itself is weakened by the fact that it is based on cases which do not exactly support it."

3. *Where There is No Other Bank in Town Where Drawee is Located.*—What is a bank to do when it receives for collection a check drawn on a bank where there is no other bank in the same town? The law leaves the bank no alternative but to collect the check through the medium of an express company, if it has an agency at that point, or send a special messenger with instructions to collect the check in cash over the drawee's counter. Possibly the best plan would be to enter into an express agreement with the depositor of the check, giving the bank authority

		\$100— Philadelphia, Feb. 1 st	
		Four months after date I pro	
RETURNED UNPAID Reason Ticked, if Known. FROM THE First National Bank, Norwich, Conn.	Check Sent Amount Paid Will Remit Will Write As Requested Date Refused Payment Stopped Protested Amt. End. Informal No Attention Not Sufficient For Endorsement Reason Endorsed	of myself	
		hundred	
		to Nail Bank, Norwich, Co	
without defalcation for value received			
No — Due June 10 —		H. J. Lumber	
LITHON Steining Box for S. & W. for Philadelphia.			

NOTE RETURNED UNPAID—REASON CHECKED

to send the check to the drawee direct, and releasing it from any liability for loss resulting therefrom. At any rate, if the bank sends the check directly to the drawee, without express instructions to do so, it is guilty of negligence, just as it would be in a case where there is more than one bank in the town in which the drawee is located.

Some of the writers on this branch of the law have expressed the opinion that there is an exception to the general rule in the case where the drawee is the only banking institution in its town, but no support for this view is found in the authorities.

The case of *Minneapolis Sash and Door Company v. Metropolitan Bank*, 76 Minn. 136, involved a check drawn on the only bank in a certain town. On the trial the plaintiff was allowed to show that it was usual and customary for banks to send checks and drafts, payable by other banks at

distant points, directly to the drawee by mail, provided there was no other bank of good standing in the same town.

In the opinion it was said: "We fail to see what possible effect upon a case of this kind the fact that the drawee is the only bank in good standing in the town can have upon the duty of a bank which undertakes a collection. Any reason for such a course is equally as sound where there are two or more banks in the town as where there happens to be but one. * * * We cannot agree with counsel that the usage and custom here relied upon is a defense to the claim that the defendant was negligent when forwarding the check to the Mapleton Bank (drawee) for presentation and payment. As a general rule usage and custom will not justify negligence. It may be admitted that such a course is frequently adopted, but it must be at the risk of the sender, who transmits the evidence of indebtedness upon which the right to demand payment depends, to the party who is to make the payment. Such a usage and custom is opposed to the policy of the law, and is unreasonable and invalid."

Another such case is *Pinkney v. Kanawha Valley Bank*, 68 W. Va. 254. It there appeared that, on September 25, 1900, the plaintiff Pinkney received a check, payable to his order, which he deposited in the defendant bank for collection. The drawee of this check was the only banking institution located at that point. On the following day the defendant sent the check to the drawee by mail, with instructions to ship the amount, for which it was drawn, in currency. The currency was not shipped and the drawee bank subsequently closed for good.

In its defense the defendant bank claimed that, under the circumstances, and in view of the fact that there was no other bank at the place where the drawee bank was located, it was not negligent in sending the check directly to the drawee. It was argued that, as the plaintiff had been a customer of the defendant bank for years, and accustomed to do business in Charleston, where the defendant bank was located, and, as he lived at Montgomery, where the drawee bank was located, and knew that the drawee was the only bank at that point, he was chargeable with knowledge of the custom on the part of the bank to send such checks directly to the drawee, and was bound thereby. The court, however, held that an exception to the general rule, which

makes it negligence to send a check directly to the drawee, to be applied in cases where there is no other bank at the place where the drawee is located, is contrary to the weight of authority and reason.

The defendant in *Wilson v. Carlinville National Bank*, 187 Ill. 222, was a depositor in the plaintiff bank and the action was brought to recover the amount of a check which he had deposited and which he had been allowed to draw against, the check being afterwards dishonored. The facts concerning the collection were these: On June 1st, 1893,

<i>No. 345</i> CASH ITEM. NO PROTEST. Kindly remove this slip before presenting item. If not paid give reason. COWLITZ COUNTY BANK, Kalama, Wash. <i>\$210-</i>	<i>Philadelphia, May 1</i> <i>Trust Company</i> <i>E. Scott</i> <i>and ten</i> <i>D. M. O. Good</i>
--	--

CASH ITEM WITH "NO PROTEST" SLIP ATTACHED

the defendant deposited in the plaintiff bank a check for \$300, drawn on the Citizens' Bank of Gillespie, Gillespie being a nearby town. The amount was subsequently withdrawn by the defendant. On the day of receipt the check was sent to the plaintiff's St. Louis correspondent. That bank sent it to a Chicago bank which sent it directly to the drawee, by which it was received on June 5th. On the 7th the drawee sent its draft on St. Louis for the amount of the check, but payment of the draft was refused because of the failure of the Gillespie bank on the 8th. Illinois is one of the States which holds that a bank in which a check is deposited for collection is not liable to the depositor for the default of a correspondent bank, where it uses due care in the forwarding of the check and in the selection of a bank to handle the collection. The defendant contended that, if the plaintiff bank knew that its correspondent, by itself or through another bank, would send the check directly to the drawee, which it appears was the only bank at that

point, then the plaintiff did not act with reasonable care in the selection of its correspondent and should bear the loss.

It was held, however, that since the depositor was aware of the fact that the drawee was the only bank at Gillespie he was estopped from claiming that the plaintiff was negligent in sending the check forward for collection in accordance with the custom in such cases. The reasons are found in the following statement taken from the opinion: "The evidence further sufficiently established that appellant (depositor) knew there was but one bank in Gillespie, namely, the Citizens' Bank, upon which the check he held was drawn. It was also shown by the proofs that the appellant had, on prior occasions, deposited with the appellee bank (plaintiff) other checks on out-of-town banks, and availed himself of the facilities offered by the system adopted and in vogue only among banks and bankers for the collection of that class of paper. He may not have known the details of the system or custom in force among banks for the collection of such checks, but he knew the collection was to be made, without expense to him, through banks coöperating together, in compliance with certain usages and customs existing between such institutions to enable such collections to be so made. He knew there was but one bank in Gillespie, and that the one on which the check was drawn. The coöperation of that bank was essential to the operation of the mode of collection of the check; for there was no other bank at Gillespie to act in the matter. With this knowledge the appellant accepted the benefit of the facilities for the collection of his check which the banks held out to their customers. The usages and customs thus availed of by appellant contemplated the sending of the check directly to the bank on which it was drawn, there being no other bank at that point. The appellant having knowledge that there was but one bank at Gillespie, and that his check was to be collected without cost or expense to him, through the medium of business usages and customs in force only between banks and bankers, could not be permitted to accept the facilities thus afforded by the appellee bank for his accommodation, and afterwards insist that compliance by the appellee bank with the usages and customs, the benefit whereof he sought to avail himself of, should constitute actionable negligence."

This case is, therefore, not a direct authority for the

RETURNED UNPAID Reason checked, if known.		Check Sent Amount Paid Will Remit Will Write As Requested No Funds Refused	Chicago 4/25 At sight Order of J. M. Moore & Co
FROM FIRST NATIONAL BANK of — Pa.	Payment Stopped Protested Not Correct No Attention For Signature For Endorsement	Due received and charge the same to account of J. H. Small Co Pittsburg, Pa.	

SIGHT DRAFT RETURNED UNPAID WITH REASON INDICATED

proposition that a bank, in which a check is deposited for collection, may forward the check directly to the drawee, if it appears that the drawee was the only bank at that place. It holds merely that the bank, in which the check is deposited, is not liable to the depositor, where it sends the check to a correspondent bank, by which it is forwarded to the drawee bank, in a case where it is shown that the depositor knew that there was no other bank at the place where the drawee is located and was aware of the fact that the check would

Returned to No. by

Guaranty Trust Co. of New York

FOR REASON MARKED X X

Guarantee of Endorsement	Date
Filling	Guarantee of Amount
Signature Incorrect	No Account
Endorsement of each Payee	Insufficient Funds
Signature Missing	Account Closed
Missing Endorsement	Written Official Endorsement
Sent Wrong	Bank Stamp

SLIP ATTACHED TO RETURNED ITEMS GIVING REASON FOR THE RETURN

be collected without expense to him through other banks in accordance with banking usages.

Where the depositor assents to the sending of the check straight to the drawee, the bank will not be held liable. The plaintiff bank, in the case of *First National Bank v. Citizens' Savings Bank*, 123 Mich. 336, sent to the defendant bank for collection a certificate of deposit, issued by D. F. Parsons, a private banker at Burr Oak, Mich. The certificate was accompanied by the following letter: "We send this C-D for \$165,000 and int. to you for collection, as we note that you have a correspondent at Burr Oak, Mich. Please collect for us at your best rate of exchange and oblige." The defendant's correspondent was the banker by whom the certificate was issued, and as there was no other bank or banker at Burr Oak, the certificate was forwarded to him direct. The certificate was not collected, owing to Parsons' failure after the receipt of the certificate by him. It was held that the letter sent to the defendant by the plaintiff, along with the certificate of deposit, was equivalent to an instruction to send the certificate directly to Parsons.

4. *Effect of Custom to Send Checks Direct to Drawee Banks.*—Custom will sometimes sanction a practice which would otherwise be declared invalid. But the fact that it is customary to send checks directly to a drawee bank for collection does not render such practice proper in the eyes of the law. The question was raised in the case of *Farley National Bank v. Pollak & Bernheimer*, 145 Ala. 321. The plaintiffs deposited a check for collection and the bank in which it was deposited forwarded it directly to the drawee, which sent back a draft on New York for the amount of the check. The draft was not paid on presentment because of the failure in the meantime of the bank on which the check was drawn.

In disapproving the custom among banks to send checks deposited for collection directly to the banks on which they are drawn, the court said: "It may be admitted that a party committing a paper to a bank for collection may be bound by a custom which is reasonable and sufficiently general to presume that it is known. * * * Undoubtedly an agent who undertakes to collect a claim, although by custom he may be allowed to employ sub-agents, yet is certainly bound to select

his sub-collecting agents with judgment and care, and one of the first elements of care is to select a sub-agent who is not adversely interested in the subject matter. What would be the use of a party placing his claim in the hands of a bank for collection, if that duty could be performed by merely indorsing the paper by mail to the party who is obligated to pay it and receive his check on New York? The owner of the paper could send it directly and receive his New York exchange in much less time. A custom must be reasonable, and the best considered cases hold, not only that the bank or party who is to pay the paper is not the proper party to whom the paper should be sent for collection, but also that a custom to that effect is unreasonable and bad."

Such a custom, however, has been held valid, as applied to a check made payable to the order of the collecting bank. *Kershaw v. Ladd*, 34 Oregon 375. The plaintiff sent for collection to the defendants, who were bankers at Portland, a check drawn on a bank at Sheridan, Oregon, fifty miles distant from Portland. The check was drawn by the plaintiff and was payable to the order of the defendants. It was received by the defendants on the 16th and forwarded directly to the drawee bank on the same day, by whom it was received the next day. On the 23d the drawee drew a draft on its correspondent at Portland, which it sent to the defendants on the 24th, and which was received by the defendants on the same day. On presentment payment was refused for the reason that the Sheridan bank had closed its doors on the 24th. It appeared that there was a reliable express agency at Sheridan and that there was also another bank located there. The bank, however, had been doing business for a short time only and it was not shown that the defendants had any knowledge of its existence.

The parties agreed that there was a well established custom among the banks of Portland to the effect that, when a bank received for collection an ordinary check, drawn on a bank in another place, the collecting bank would forward the check directly to the drawee for collection and returns, provided that the collecting bank had no agent or correspondent at the place where the drawee bank was located.

It was held that this custom was reasonable, in so far, at

least, as it applied to an unindorsed check, payable to order of collecting bank.

ENDORSEMENTS.

The question of endorsements is one of considerable importance. Up to 1898 the restrictive form of endorsement was used on all items whether taken as cash or for collection, the form generally reading "Pay to the order of receiving bank for collection, for account of sending bank." The matter of bank endorsements was revolutionized by the now

		\$1000— Argyle, Minn. 5
Paper or papers attached; as ticked on end, deliver only on payment ~~as~~ ~~contents~~ of the draft.		On arrival of car
Farmers & Merchants Bank. Argyle, Minn.	PAPER ATTACHED Bill of Lading ☒ Order Receipt Bill Policy Certificate Note	of Farmers and Merchants Bank thousand
Paid and charge the same to acco.		
To New York Grain Co. No. New York,		Simpson Wheat

Wm. R. Gorton, 301 Market St. Philadelphia.

DRAFT WITH BILL OF LADING ATTACHED—"ARRIVAL DRAFT."

famous decision in *National Park Bank v. Seaboard National Bank*, 114 N. Y. 28. In this case a check drawn on the National Park Bank for \$18 was raised to \$1,800 and sent to the Seaboard Bank for collection and credit and endorsed "for collection only." The check was paid by the Park Bank for \$1,800 and later it was discovered that it was raised. The Park Bank sought to hold the Seaboard Bank, which had turned over the proceeds to its correspondent, the account having been closed. It was held that neither the Seaboard Bank nor the bank sending to the latter was liable under the restrictive endorsement.

The case created considerable excitement in banking circles and led to the widespread use of unrestricted endorsements, making the endorsers liable as such on all items. The New York Clearing-House abolished all restrictive endorse-

ments on paper passing through its channels. The rule has been adopted throughout the country.

In handling collections banks should exercise due care in selecting agents. The Supreme Court of the United States lays down the general rule of law to be that the initial bank is liable for such damage as has been sustained by the negligence of its sub-agent or collecting bank. This rule is modified in many of the States and is as follows: "The initial bank, if it selects as an agent one who is competent and worthy of trust and transmits the paper to him, its duty is done, and the owner of the collection must look to the sub-agent for any default of which he is guilty."

A bank, however, may vary its contract by express agreement, and this banks seek to do by printed notices on their deposit tickets, or on the inside cover of pass-books, to the effect that the bank assumes no responsibility for the collection of any item beyond due care and diligence in the selection of collecting agents, and that items are taken at the risk of the customer and that the bank will not be responsible for any loss through failure or default of the bank's agent. (See chapter on **Receiving Teller**.)

The above case held that the bank receiving paper indorsed to it "for collection" was a mere agent and not responsible for genuineness after paying over the proceeds to its principal. The rule adopted by the New York Clearing-House and substantially followed by the other clearing-house associations throughout the country excluding all restrictively endorsed paper unless guaranteed, applies only to items collected through the exchanges. Usually these items represent cash, having been received on deposit and credit given therefor, or the cash paid out at once, by the initial bank; the exceptions being collection items in the form of notes or acceptances made payable at a bank, or an occasional check.

While the strict language of the resolution adopted by the New York Clearing-House Association limits the operation of the rule to items collected through the exchanges, yet in all of the principal cities where banks are located which do collecting for other banks, these collecting banks have quite generally set their faces against restrictive endorsements for the reason that they wish to be protected in any contingency which might arise, by the warranties that go

with a general endorsement. Some authorities insist, however, that a bank in acting as the agent in the collection of items should never assume the warranties of a general endorser. This contention would more naturally appeal to country bankers, and an argument in support of the restrictive form of endorsement is given briefly, as follows: It is a settled principle of law that in the absence of an indication to the contrary, the form of the endorsement controls the title or ownership to negotiable paper. The title to or ownership of an item left with a bank for collection remain-

Union Bank & Trust Company

Report by No. 5235

Jackson, Tenn., _____ 191__

We enclose for collection and remittance:

ENDORSED BY		PAYER	DUE	AMOUNT
Date and No.				
Maker				

To

Items \$10.00 and under no protest.
Protest items not marked X.
Deliver documents only on payment of items.
Telegraph non-payment of items over \$500.00.

COLLECTION LETTER

ing in the customer and the bank's relation being simply that of an agent, this form of endorsement gives to all parties through whose hands it passes, notice of this ownership, and that the collecting bank or its agents acquire no title therein.

Where a collecting bank has notice that the prior bank has no interest in an item transmitted for collection and that it is acting merely in the capacity of an agent, the collecting bank cannot under any circumstances retain the proceeds as against the true owner. But where the collecting bank has not notice and the prior bank is indebted to it in

DATE SENT	PAYER	AMOUNT	WHERE PAYABLE	DUE	ENDORSER																														
Original, goes with the item. PROTEST if not paid. THE FAVOR OF PROMPT RETURNS IS REQUESTED UPON THE ITEM HEREWITH ENCLOSED FOR COLLECTION. RESPECTFULLY, IRVING NATIONAL BANK NEW YORK																																			
Acknowledgement, returned to bank. Above item received and entered for collection, _____ 19__ _____ Bank of _____ PLEASE SIGN AND RETURN BY FIRST MAIL To Irving National Bank New York.																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">DATE SENT</th> <th style="width: 25%;">PAYER</th> <th style="width: 15%;">AMOUNT</th> <th style="width: 25%;">WHERE PAYABLE</th> <th style="width: 10%;">DUE</th> <th style="width: 10%;">ENDORSER</th> </tr> </thead> <tbody> <tr> <td colspan="6" style="text-align: center; padding: 10px;"> Hold in bank until item is paid. Sent to customer. Date Advised Paid _____ CREDIT BILLS DISCOUNTED. </td> </tr> <tr> <td colspan="6" style="text-align: center; padding: 10px;"> DEBIT <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">DATE SENT</th> <th style="width: 25%;">PAYER</th> <th style="width: 15%;">AMOUNT</th> <th style="width: 25%;">WHERE PAYABLE</th> <th style="width: 10%;">DUE</th> <th style="width: 10%;">ENDORSER</th> </tr> </thead> <tbody> <tr> <td colspan="6" style="text-align: center; padding: 10px;"> This copy forms the charge ticket to the collecting bank. </td> </tr> </tbody> </table> </td> </tr> </tbody> </table>						DATE SENT	PAYER	AMOUNT	WHERE PAYABLE	DUE	ENDORSER	Hold in bank until item is paid. Sent to customer. Date Advised Paid _____ CREDIT BILLS DISCOUNTED.						DEBIT <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">DATE SENT</th> <th style="width: 25%;">PAYER</th> <th style="width: 15%;">AMOUNT</th> <th style="width: 25%;">WHERE PAYABLE</th> <th style="width: 10%;">DUE</th> <th style="width: 10%;">ENDORSER</th> </tr> </thead> <tbody> <tr> <td colspan="6" style="text-align: center; padding: 10px;"> This copy forms the charge ticket to the collecting bank. </td> </tr> </tbody> </table>						DATE SENT	PAYER	AMOUNT	WHERE PAYABLE	DUE	ENDORSER	This copy forms the charge ticket to the collecting bank.					
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COLLECTION LETTER FOR BANK'S OWN PAPER—THREE CARBONS AND ONE ORIGINAL

general balance, in the event of the failure of the prior bank, it is generally held that the collecting bank can hold the proceeds of a collection against the true owner. The right of lien rests upon the further consideration, viz., that in the case of negotiable paper one who successfully enforces a lien must be a holder for value and without notice. In

most of the States, in fact, in all of the States which have adopted the Negotiable Instruments Law (Wisconsin excepted), an antecedent or preëxisting debt constitutes value. The qualification without notice expressed in full is "without notice of equities existing between prior parties."

It may be contended that these considerations are of interest to the customer of a bank rather than to a bank, and that the customer should safeguard his own interests by using the appropriate form of endorsements on his collection items, rather than expecting the bank to protect these interests for him. It may also be claimed that where the customer leaves an item for collection endorsed in blank, or to order, and the item is sent direct to the collecting bank, that in the event of default by either bank, the position of the customer will not be improved by the mere fact that the sending bank had endorsed the item restrictively. As to the latter contention, we answer that neither is the position of the bank or its customer made worse by the use of the restrictive form of endorsement, and that where one or more banks intervene between the initial and the collecting banks in the chain of transmission, the rights of the bank and of its customer are preserved, by the use of such endorsement in any contingency which may arise.

As to the first contention, a bank has items to be collected which belong to it, viz.: discounted bills or notes. It will surely not be denied that its duty to its stockholders makes it incumbent on a bank to take every precaution in the collection of this paper, so as to protect the bank against possible loss. As this is the course which prudence dictates in such a case, and as it is the duty of the bank as agent to act as a prudent man would in his own affairs, it becomes its duty in the forwarding of items left for collection to use that form of endorsement which will best preserve the rights of a customer in possible contingencies which might arise. There is perhaps no better general rule of business policy for a bank to adopt in the management of its collection department than that quoted as the measure of its legal duty, and if a bank uses "ordinary care and diligence," always "keeping in mind the best interests of its principal," its success in holding old and in securing new business should be

assured; provided, of course, that it is in a position to collect as cheaply as will its competitors.²

THE MACHINERY OF COLLECTIONS

Collections consist of all forms of commercial paper and include many items which are not commercial paper, strictly speaking. A bank may handle under this classification in the course of a year's business, bonds, coupons, notes, mortgages; sight, demand, time, domestic and foreign drafts; bill of lading drafts, every known form of insurance claim and voucher; certificates of deposit, checks and bank drafts, checks on savings accounts with pass-books attached; mutilated coin and currency, foreign money, even pawn tickets and tickets for winnings on races and prize fights.

Checks are payable on demand; time items when due, as indicated on the face. If they are sent for acceptance before due, the drawee writes the word "accepted" and his name, when the item is held until due and presented for payment. Sight drafts are payable on presentation. They may be paid by accepting, payable at the bank, and this is authority for the bank to charge the customer's account and remit.

A "city collection" is one which is to be presented by the messenger. A foreign collection is one to go through the mails, the holding bank being simply a link in the chain of collection. If an item subject to protest is lost it may be protested by a description, so it becomes needful that the record be complete as to details. Banks should follow the advice of their correspondents in the matter of protest, and banks should indicate their wishes in the letter accompanying the item. Protest where protest is instructed; and if there is an indorser who would be released if protest were not made, the item should be protested. Unpaid items should be returned promptly; advice given of paid items, or remittance for the same the day received, and indirect routing avoided in collection items. If items are returned, always give the reason. Time drafts should be presented promptly for acceptance.

The items which a bank handles may be divided into two

²Pamphlet on Clearing-House, etc., issued by American Institute of Banking.

IRVING NATIONAL BANK
NEW YORK

DATE RECEIVED	NUMBER	PAYER	AMOUNT	DUE	DISPOSITION
		This copy goes to the customer.			

IRVING NATIONAL BANK
NEW YORK

DATE RECEIVED	NUMBER	PAYER	AMOUNT	DUE	DISPOSITION
		This copy goes to the bookkeeper.			

IRVING NATIONAL BANK
NEW YORK

DATE RECEIVED	NUMBER	PAYER	AMOUNT	DUE	DISPOSITION

MATURITY SLIPIRVING NATIONAL BANK
NEW YORK

DATE RECEIVED	NUMBER	PAYER	AMOUNT	DUE	DISPOSITION
		This copy forms the permanent record.			

CITY COLLECTION FORM—ONE ORIGINAL, THREE CARBONS—SEE EXPLANATION ON FORM

main groups: The cash items and the collection items. The latter may be still further classified into items immediately payable and essentially cash items, and the time items. The former class includes all drafts and notes which are payable at sight; while the latter includes those payable at a fixed time, and are usually received or sent in advance of the time

of payment so that they will be ready for presentation at the date due. Cash items are immediately convertible into money, and time items are to be turned into money.

To facilitate the handling of these items, it has been found best to divert them into two channels, and this is done in coöperation with the depositor, who is advised to list all checks separately and all collection items, including drafts, coupons, etc., likewise. A "collection" is, therefore,

RECALL NOTICE Irving National Bank NEW YORK. 				
Please Return Without Protest				
DATE SENT	PAYER	PAYABLE	DUE	AMOUNT

Yours respectfully,

Collection Clerk

191

RECALL NOTICE FOR COLLECTION ITEM

an item to be collected. And in order to have a clear understanding of just what happens in this connection, it may be well to anticipate the chapter on the "Mail," and follow a sack of mail as it comes from the post office. As the letters are opened their contents are sorted, the cash items, checks, etc., being placed by themselves and collections by themselves.

We are concerned now with a collection only. There must first be a complete record of the paper, and the item must have care while in custody of the bank until it is finally disposed of by payment or returned to the source from whence it came. Its due date is the most important part.

The clerk compares the item with the letter which accompanies it, noting instructions as to whether to protest

or not. The most frequent notice is that of protest or no protest. The instructions on collection letters differ, some banks directing that all items not marked "no protest" should be protested; others that only items over a certain amount must be protested, and others mark all items to be protested; but whatever the rule the notice should be heeded and passed on to the next in line unless the instructions are to be changed.

The drafts which the collection clerk will receive for collection are sight drafts payable on presentation; time drafts payable a certain time after date or at a designated date; drafts with bills of lading, the latter to be surrendered upon paying the draft or accepting it, and drafts drawn "on arrival" of the goods. When the latter are received they are listed in the "arrival book" and the drawee notified. They are held until called for and payment made and often accompany large shipments moving by slow freight. Sight drafts are presented as soon as received; time drafts are held until their due date, but are generally presented for acceptance as soon as they are received. By accepting the time draft, the acceptor engages that he will pay when due. It makes it a promissory note. If the notice is sent by mail, note is made of the fact in the record, and if the drawee does not respond (he has twenty-four hours in which to accept), it is returned. If a bill of lading or other papers are attached, the instructions as to disposition are noted and followed.

Let us take a note of John Smith for \$500, payable June 1st, 1915, at the First National Bank, New York, received from the First National Bank of Philadelphia. The number on the note is 15,534. It is first verified as to maturity, and the maturity usually indicated in colored pencil. Being a home note, it is recorded in the home tickler, or city collection register, under June 1. The data recorded is: Date, time to run; name of maker; where payable; when received; from whom received; the number, amount, protest or not; our number (indicated by number corresponding to line on which it is entered), fate and remarks. The data may be considerably abbreviated by using such abbreviation marks as 1/14, 1st. Phil., etc. The column of "fate" is left open, of course, until the item is paid, returned unpaid, protested or recalled. If protested

TO

DATE SENT	DRAWEE	AMOUNT	DUE	EXCHANGE	DOCUMENTS	ENDORSER
-----------	--------	--------	-----	----------	-----------	----------

Original, goes with item for collection.

NO PROTEST

The favor of **PROMPT RETURNS** is requested upon the item herewith enclosed for collection.

IF UNPAID PLEASE GIVE FULL REASON



Irving National Bank
New York.

DATE SENT	DRAWEE	AMOUNT	DUE	EXCHANGE	DOCUMENTS	ENDORSER
-----------	--------	--------	-----	----------	-----------	----------

This copy held in bank for tracing purposes.

Tracing Slip

Irving National Bank
New York.

DATE SENT	DRAWEE	AMOUNT	DUE	EXCHANGE	DOCUMENTS	ENDORSER
-----------	--------	--------	-----	----------	-----------	----------

This copy the bank's permanent record of the item.

Permanent Record

Irving National Bank
New York.

DATE SENT	DRAWEE	AMOUNT	DUE	EXCHANGE	DOCUMENTS	Advice for
-----------	--------	--------	-----	----------	-----------	------------

This copy goes to customer as advice of payment.

Expense

Net Credit

IRVING NATIONAL BANK
New York.



DATE SENT	DRAWEE	AMOUNT	DUE	EXCHANGE	DOCUMENTS	Disposition
-----------	--------	--------	-----	----------	-----------	-------------

This copy forms the credit ticket to customer

Expense

Net Credit

Irving National Bank
New York.

DEBIT

DATE SENT	DRAWEE	AMOUNT	DUE	EXCHANGE	DOCUMENTS	DISPOSITION
-----------	--------	--------	-----	----------	-----------	-------------

This copy constitutes the charge ticket to the collecting bank.

Irving National Bank
New York.

the word "Notary" is entered opposite with the date indicating that it went to the bank's notary for protest on that date.

NOTIFICATION

It is customary for banks holding items for collection to mail notice to the maker or drawee a week or so before the item is due. The next step is to make out a credit and advice slip, which are to be used if the note is paid. Carbon is used and two copies made. In one large city bank all city items requiring presentation or payable through the clearing-house are written up on carbon books, whereby credit ticket advice of credit and file record are made in one operation, then they are sent out by messengers for presentation to the parties on whom they are drawn. The messengers make their returns to the note teller, who puts through the credits for them. Time items presented for acceptance are returned to the collection department, after acceptance, when they are treated as notes.

The city and country notes are separated, the maturity dates and interest are figured on the city items and they are entered on a collection tickler under maturity dates, also in an index book under the name of the correspondent from whom received, so that they can be located in case the owner should enquire about or recall them. Then a credit ticket and advice (original and duplicate) are made and attached to each item and they are delivered to the note teller, for collection at maturity. The collection tickler is a loose leaf book, and each day the leaf for that day is turned over to the note teller, who must account at the close of the day's business for each item listed on it.

When paid the credit ticket is sent to the bookkeeper and the duplicate to the owner. The ticket contains the number, name of maker, amount, when due, and where payable. Open-faced "window" envelopes are used to avoid addressing envelopes.

After recording the items they are held until maturity, and if a note-teller's department is operated, they are turned over to him for collection on the due date. The work of this department, therefore, follows.

COLLECTION DEPARTMENT TRACER

Guaranty Trust Company of New York

New York, _____

Dear Sir

Please report on the following collections:

NAME	AMOUNT			SENT YOU	DUE

Guaranty Trust Company of New York

COLLECTION DEPARTMENT TRACER

THE NOTE TELLER

The items that come to the note teller may be from the bank's correspondents, or the bank's own paper that must be collected, and items received from the tellers for like purpose. Inasmuch as the note teller handles the same class of items as the collection clerk he makes the same records, but his work involves considerable cash, since the items will be paid for in cash, checks, etc. The note teller, therefore, carries a cash balance since he is receiving pay for maturing notes and drafts constantly. In some banks he is also charged with the collection of interest on loans, the list of

Form 146 B (100-10-1)

The Market and Fulton National Bank.

New York, _____ 191

Please report **BY RETURN MAIL** on the following items:

NAME	PLACE	SENT	DUE	AMOUNT	ANSWER HERE

IF NOT PAID. RETURN AT ONCE

Yours respectfully,
JOHN H. CARR, Cashier.

TRACER FOR COLLECTION ITEMS

amounts due being furnished him, notices being sent out, and as payments are made they are taken off the list, the amount unpaid being known from this list. Exchange charges are also listed and collected by him, some customers preferring to pay these charges in cash rather than to have them deducted from the deposits. As the note teller's cash becomes more than he needs, he will turn it over to the paying teller. He receives from the discount clerk the day's maturities, and is accountable for all that he receives, and must return the items or the cash at the end of the day. Notes that are to be paid through the exchanges are, of course, put in with the exchanges of the day, and those to be presented by messenger sent out on the route.

If a note is to be paid the note teller will have instructions to honor it through the exchanges, and these items are sent to him, and if not instructed otherwise, they are paid by him and charged to the customer's account. The making of a note payable at a bank where the maker carries his account is equivalent to an order on the bank to pay the same, and unless instructed otherwise the bank will do so.

Notes are often presented over the counter, and the bank will accept the note, payable through the clearing-house, and so stamp it, and it becomes a cash item for the next day's clearings. All notes coming through the clearing-house for which no provision has been made as to payment are sent back to the bank from which they came before the expiration of the time limit.

Notes that at the end of the day have not been paid are protested, by handing to the bank's notary, who makes out formal notice of protest and mails copies of the same to the indorsers. After the notary has made legal presentment and protest, the item is returned from whence it came, and the fees charged to the indorser. If it is the bank's own paper, it is held for adjustment among the past due items.

The teller proves by taking the cash balance at the beginning of the day, and adding what he received and crediting himself with payments made, the balance being the amount called for in his cash. After the day's work is over, except balancing, the teller will have on hand, cash, coin, checks on local banks, and it may be a few on out-of-town banks. These are charged to the different departments, and surplus money turned over to the paying teller. All cash

Irving National Bank

NEW YORK.

CAPITAL \$4,000,000
SURPLUS \$3,000,000



New York,

DATE _____

N^o 2286

We enclose the following items for Collection and Remittance.

Yours truly,

Telegraph Non-Payment of items exceeding \$500.00. Items under \$25.00 and those marked X **NO PROTEST**

HARRY E. WARD,

Cashier.

PLEASE SIGN AND RETURN IMMEDIATELY

IRVING NATIONAL BANK
NEW YORK.

The within described Cash Letter
has been received with enclosures as stated.

N^o 2286

Yours truly,

NAME OF BANK _____

Remarks : _____

IRVING NATIONAL BANK
NEW YORK.

Our Cash Letter N^o 2286

Acknowledgement Received _____

Traced _____

might be so turned in, the note teller making no payments in cash, his cash being incoming only. If he should be charged with honoring notes payable at his bank, payment would be by cashier's checks, clearing-house due bill, or an acceptance payable through the clearing-house the next day.

OUT-OF-TOWN COLLECTIONS

The term "transit item" is properly applied to those items received in the regular course of business which are immediately credited and which are treated as cash. These are largely, if not quite altogether, checks; while collections are made up principally of notes, drafts, bills of exchange and other items left for collection by customers, credit to be given only when, as and if collected.

These items do not appear on the statement of condition, and are not assets of the bank, nor does any liability accrue until collection is made, except it be for the use of care.

The collection department is closely associated with the receiving teller's department, since it is charged with the collection of all items received by him that do not (a) go direct to the bookkeepers; (b) items that do not go through the clearing-house, and (c) transit items, which are to go out as cash. The transit and collection departments may be one, or two, as the needs of the bank require; or this work may, as frequently obtains, be part of the bookkeeping system and be done in connection with the duties of other men; but whatever the machinery of the bank, the purpose is to obtain payment for such items as are not to be regarded as cash by the receiving teller, and to turn into cash the items, such as coupons, etc., cashed by the paying teller or received from correspondents.

The out-of-town collections will consist of all instruments that are not regarded as cash, or which require more care and attention than a cash item is given, as, for instance, a block of bonds for registry, or a deed to be delivered upon receipt of the money, etc. Of late years it has been the custom among merchants to draw on their debtors if the bill is not paid according to pre-arranged terms, and these drafts are sent out by large firms by the hundreds. They must be presented for payment, and this is part of the work of the collection department and the messenger.

A great many of these collection items are frequently no more or less than "duns," and many are returned with the notation "will send check." Some merchants expect that their firms will draw on them and make it a policy to honor such drafts, as a simple and easy way of making payment, leaving it to the firm to use its judgment as to when to draw. Some banks refuse to handle such items unless a modest fee accompanies, and in this they are fully justified, for the process consumes time, expense and labor and is

N^o 18892 Amount, \$ 800.00
 Maturity April 1, 1913 Interest, \$
 Endorser Geo. W. Evans Total, \$

Maker Mr. E. J. Bailey,
City.



THIS SLIP ATTACHED TO NOTE UNTIL DISPOSED OF BY RENEWAL OR PAYMENT

largely a courtesy, the profit being inconsiderable. Drafts accompanying shipments of merchandise are also collected in this way.

The maturity dates of country notes are figured and noted on each and they are listed in a register and numbered to correspond with the numbers on the register, then they are endorsed to the bank's various correspondents in the towns where the items are payable, and a letter written to accompany each item. The letters are written on a form, using a carbon sheet, which makes a copy of the letter on a card, and the name of the owner of the item is written or stamped at the top of the card. These cards are then filed according

to maturity dates, and the cards under each date arranged alphabetically according to the place where payable.

This system will be found very convenient for handling country collections. The register refers to the card by means of maturity date and town where payable and the card to the register by means of the number, so that it is always possible to locate an item from the owner's tracer, and one can always tell at a glance what items are due or past due. Correspondents, when writing or telegraphing about an item, or when remitting for paid collections, often neglect to give proper description of the items. It is very desirable, therefore, to be able to locate such items quickly on your records. This card record makes it possible to locate items readily even though imperfectly described. After the items are paid, or otherwise disposed of, the cards are filed in another file under the name of the owner of the note.

Credit tickets for these items and all other out-of-town items are made when payment is received, on a duplicate form, using a carbon sheet; the carbon copy being the advice of credit and the original the credit ticket; the original going to the bookkeeper and the duplicate to the customer.

Let us suppose that June 2nd arrives and in the morning mail there is advice to the effect that No. 15,534 sent to the First National Bank of New York has been paid. Turning to the cabinet the clerk finds the duplicates of the slips that have gone to the First National Bank of New York and takes out the three connected with this item. He compares the number and amount with the advice received. He marks the item paid in the tickler, sends one slip to the bookkeeper for credit to the depositor from whom received, one to the bookkeeper to charge against the bank crediting the item, and the advice slip to the owner of the paper.

Where the bank has no regular correspondent in the place, it will send to the nearest town where it has connections, and thus from bank to bank the item will go until it reaches the place of payment. Frequently the bank, in order to save time, will despatch the item in a more direct route, to some bank in the place where the instrument is payable, preferably some other bank than the one drawn on, and by using the bank directories such a proper collecting agency will be selected.

To						Endorser
DATE SENT	NUMBER	PAYER	AMOUNT	DOCUMENTS	DUE	
		Original.				
This copy goes with the item.						

PROTEST unless otherwise instructed

The favor of **PROMPT RETURNS** is requested upon the item herewith enclosed for collection.

IRVING NATIONAL BANK
NEW YORK

To						Endorser
DATE SENT	NUMBER	PAYER	AMOUNT	DOCUMENTS	DUE	
		This copy goes with the item, to be signed and returned.				

Acknowledgement Only

IRVING NATIONAL BANK
NEW YORK

DATE

DATE

To						Endorser
DATE SENT	NUMBER	PAYER	AMOUNT	DOCUMENTS	DUE	
		This copy is held in the bank for tracing. Filed under dates.				

Maturity Slip

IRVING NATIONAL BANK
NEW YORK

						Customer
DATE SENT	NUMBER	PAYER	AMOUNT	DOCUMENTS	DUE	
		This is the bank's permanent record. Filed under customer.				

Permanent Record

To be filed under Customer

IRVING NATIONAL BANK
NEW YORK

						Advice For
DATE SENT	NUMBER	PAYER	AMOUNT	DOCUMENTS	DUE	
		This copy goes to the customer when the item is paid.				

Expense

Net Credit

IRVING NATIONAL BANK
NEW YORK

						Disposition
DATE SENT	NUMBER	PAYER	AMOUNT	DOCUMENTS	DUE	
		This copy goes to the bookkeeper as a credit to the customer.				

Expense

Net Credit

IRVING NATIONAL BANK
NEW YORK

Debit

						Endorser
DATE SENT	NUMBER	PAYER	AMOUNT	DOCUMENTS	DUE	
		This copy becomes the charge ticket to the bank collecting the item.				

IRVING NATIONAL BANK
NEW YORK

FORM USED IN COLLECTION DEPARTMENT, IRVING NATIONAL BANK, NEW YORK. SEE EXPLANATION IN THE FORM. SIX CARBONS AND ONE ORIGINAL

Some banks have running accounts in all principal cities, settled periodically or daily. Thus, if a bank in New York has an item to collect in Cleveland, Ohio, it will send the item to its Cleveland correspondent for that purpose. The Cleveland bank will present the instrument through its messenger and either return the item unpaid or credit the amount to the New York bank and so advise it. If it has no account, it will remit by a draft less its charges for the service.

SUNDRY ITEMS

There is a class of items that pass through the bank as cash and go to banks where no regular correspondent exists. To open account for each bank so used would be needless and consume time and space. Therefore, an account is kept with "sundry banks" in the general ledger, to which is charged items that are sent to other than regular correspondents, and returns credited, the balance representing the amount so outstanding.

COUPONS

A coupon has been defined as a "little promise to pay" as distinguished from the parent bond, which is the "big promise to pay." Coupons are payable to bearer and usually regarded as good as money, are finely engraved, difficult at times to read, small, and generally difficult to handle. They are usually payable at the fiscal agency of the issuing company, which is not always named in the coupon, and this information has to be obtained from other sources.

Banks usually require interest coupons to be inserted in envelopes containing on the outside the name of the depositor, name of issuing company, when due, where payable, number of coupons and the amount. If they are due they are generally treated as cash. If not, they are held for collection. They come through the various departments of the bank, receiving teller, mail, express, or from the special safe-keeping department of the bank, or are cut from bonds held as investment or collateral. If they are for collection they are sent through the collection department; if as cash they may go through the transit department, and are sent by

(PIN COUPONS HERE.)	COUPON SLIP.	
	<u>3 Coupons of Union Pacific</u>	
	<u>R. R.</u>	
	<u>@ \$10. each.</u>	<u>Total, \$30-</u>
<u>Owner, W. O. Brown</u>		
<u>Payable at New York</u>		
<u>Due June 1-04</u>		
<u>\$30-</u>		
FROM THE Manufacturers' National Bank, PHILADELPHIA, PA.		

COUPON SLIP

registered mail, insured, to the place of payment. If payable in the same place, they are, of course, presented by messenger and payment in satisfactory form returned. Being in the nature of cash they are handled with special care and receipted for as they pass from hand to hand.

SAVINGS BANK BOOKS

Savings bank accounts are frequently collected through other banks, and where the account is not closed out, require the return of the book. The book frequently goes astray unless special note is attached indicating what disposition is to be made of it when the collection is made. In sending such collections through a chain of banks, the book usually

COUPON
ENVELOPE.NATIONAL BANK OF SCHWENKSVILLE,
SCHWENKSVILLE, PA.

<u>Coupons of Reading Co</u>				
	<u>10</u>	<u>@</u>	<u>\$25</u>	<u>\$250</u>
	<u>15</u>	<u>"</u>	<u>20</u>	<u>300</u>
		<u>"</u>		
Total, \$550-				
<u>Rec'd from Geo. Smith</u>				
<u>Due Apr. 1 1904 Payable at Phila.</u>				

IF COUPONS ARE NOT PAID, RETURN IN THIS ENVELOPE WITH REASON.

ANTH-PIN SYSTEM SLIPS.

COUPON ENVELOPE

returns through the same channel through which it came, and it is very apt to find a lodging place somewhere en route and become lost or mislaid in the files of some collecting bank, there to remain until hunted down—a process which is annoying and should be unnecessary. How much better it would be for the bank receiving the item in the first place, to attach a slip to the book, directing that the book be returned to the owner direct from the paying bank. But banks are so in the habit of returning items through the same channel as received, and the average teller being all too glad to get the transaction closed with as little delay as possible, does the simplest and easiest thing—pays the item, if regular, and hands the book back to the presenting bank, which in remitting should not only send its draft, but the book also. A little thought in the first instance will save a lot of trouble in the future. Lost savings bank books are not easy to replace, some banks requiring bond of indemnity, advertising, etc.

ITEMS FORWARDED FOR COLLECTION AND CREDIT REMITTANCE

DATE	NUMBER	MAKER	FIRST ENDORSEER	LAST ENDORSEER	ON WHOM DRAWN	AMOUNT
	1				1	
	2				2	
	3				3	
	4				4	
	5				5	
	6				6	
	7				7	
	8				8	
	9				9	

FOREIGN COLLECTION REGISTER

CHAPTER IX.

LENDING THE BANK'S MONEY

The success of a banking undertaking depends altogether upon the loans. Bank profits come from lending money—and getting it back, with interest; and if the bank gets neither, it fails to make a profit and suffers loss. Therefore the department of loans requires the greatest care, for here credit operations will take place, and whatever profits and losses accrue in the course of the year will be due to the judgments here made.

The function of loaning naturally follows that of deposit, the two being dependent upon one another. If the bank had no deposits, it would have no funds but its capital to loan, and in that measure would prove a poor investment. If a bank could continue to loan by crediting its loans as deposits, it would make money, provided the deposits were not subject to call; but inasmuch as deposits, irrespective of whether they are the proceeds of loans and discounts or not, are payable on demand, when the loans are out of proportion to the cash in hand, inflation, as it is called, obtains and the bank is in a weakened state. But it is the loan itself and not the granting of the credit that we now consider, the important subject of banking credit being reserved for another chapter.

LOANS AND DISCOUNTS DISTINGUISHED

Bank loans are made for a stated period of time, or are payable on demand; secured or unsecured. In the nomenclature of banking, a loan is made when the interest is paid periodically or at the time the loan matures, as distinguished from a discount, where the interest is taken out at the time the loan is put through. Bankers generally speak of their “discounts” as the notes of customers they have bought or discounted, and their “loans” as the advances they have made to their customers. Their “bought paper” consists of loans made through brokers—commercial paper. Loans are also spoken of, when referring to advances made on collateral and

payable on demand, as "call" or "street" loans. It is obvious that a discount must be a loan since it is an advance of money; but a loan need not be a discount, although it may be made so by taking out the interest in advance.

A discount may be based altogether upon the worth of the party offering the paper for discount, or on the joint worth of indorser and maker; while the loan on collateral would be based largely upon the value of the collateral. The borrower's standing may remotely affect the collateral loan, but in the last analysis the lender depends upon the security pledged. Loans are rarely made to the full value of the collateral, a margin being left for shrinkage.

Where the business warrants there may be a loan department charged with the duty of following all loans and keeping watch of the margin. This is especially true of the great Wall Street banks which loan millions to stock exchange brokers, and whose margin must be kept good. And where the market is fluctuating, or is in a panicky condition, this department must keep careful watch on security prices as a matter of protection to the bank. This is called the "Loan Department" to distinguish it from the "Discount Department" which handles only the paper of customers on their indorsement. The loan department would properly handle all loans on collateral whether on stocks and bonds, warehouse receipts, or other forms of collateral.

The difference between secured and unsecured loans lies largely in the fact that one has security definitely pledged, while the other has none, other than the names and credit standing of the parties. The latter cannot be watched with the same degree of care as the call loan, which can be and is given constant attention.

LOANS AND CREDIT

A loan is a present advance of cash or credit against the belief in its future payment. The form the loan takes will depend upon the maker's desires. It may be a cash advance; an open book account; the indorsement of a note (a loan of credit); the giving of a note, or the acceptance of a bill of exchange. But when the loan is made, or the credit created, a new force begins to work, and this force is as effective in the business world as money, and is cheaper.

Banks by their natural tendency to collect unemployed funds become reservoirs of capital; and by the exercise of their lending powers become centers of credit and extinguishers of trade indebtedness. Their power to cancel indebtedness, by setting off debit against credit, is their greatest usefulness to the community at large. This power we see most readily in the clearing function.

The ultimate test of the soundness of a loan is its ability to liquidate itself at maturity. And that is the reason why a mercantile loan is better than the stock exchange loan and so regarded in European circles. The stock exchange loan can only be liquidated by a sale; the mercantile loan by the process of consumption. For four months in 1914 there was no open market for securities. During August, September and October there was not a stock exchange open in the world. You could not get a quotation from any public source; you could not sell a bond or a share of stock anywhere in the world except by a private bargain. You could not publicly offer to buy or sell. There was no "market" even at war prices; and all loans based upon securities were in a state of chaos, with no hope of prompt liquidation and no means of turning into cash. But a loan on wheat, or corn, or leather, or iron, would by the law of consumption soon turn itself into money; for although the world had stopped buying stocks and bonds, it had not ceased to eat and build houses. We have based our faith on the stock exchange loan and made it our liquid security, which it is not and never can be; for in critical times it fails; but the merchandise loan—the loan based upon an exchange of goods—redeems itself, war or no war, panic or no panic.

DEPOSITS ARE OFTEN LOANS

The manner in which a bank builds up its deposits by making loans may easily be seen from the following illustration: Let us suppose a bank has capital of \$100,000 and no deposits. It begins business by making a loan to a certain individual of \$10,000. He does not desire the cash, and prefers to have credit on the books of the bank for the amount, with the privilege of checking out the amount as he needs the money to pay his bills. The bank now has deposits of \$10,000. Another borrows \$10,000 and deposits

the proceeds of the loan and the deposits become \$20,000. The bank might loan its whole capital this way, but for a provision in the law, national as well as State, varying only in the amount required and not in the principle involved, and known as the reserve requirement. By this a bank is required to set aside in cash or keep on deposit with approved reserve agents a portion of its deposits, running from five to eighteen per cent., depending upon the nature of the obligation created, whether time or demand, the place and the character of the bank.¹ The danger in banking may be seen from the extension of this loaning process.

Let us suppose that a bank has a capital in cash of \$100,000 and no deposits. It must set aside by law ten per cent. of its deposits as reserve. It begins to make loans. It loans A \$20,000 (which he deposits) and it sets aside \$2,000 as reserve, crediting him with the loan. Let us assume it puts the \$2,000 in a vault by itself. It loans B \$20,000, setting aside \$2,000 more, and credits B with \$20,000. It loans C and D \$20,000 each likewise, setting aside \$4,000, and credits the amount. There is now in its reserve \$8,000, and \$92,000 of its capital still in cash, and it can loan all but its reserve to E. This it loans to E in cash. The transaction tabulated will look like this:

Capital	Cash to loan	Loans	Reserve	Deposited
\$100,000	\$100,000	.....	.....	.....
.....	.....	(A) \$20,000	\$2,000	\$20,000
.....	98,000	(B) 20,000	2,000	20,000
.....	96,000	(C) 20,000	2,000	20,000
.....	94,000	(D) 20,000	2,000	20,000
.....	92,000	(E) 92,000	.....	(Cash paid)
		<u>\$172,000</u>	<u>\$8,000</u>	<u>\$80,000</u>

The balance sheet will then be:

ASSETS		LIABILITIES	
Loans and discounts.....	\$172,000	Capital	\$100,000
Cash	8,000	Deposits	80,000
	<u>\$180,000</u>		<u>\$180,000</u>

If only A and B ask for their money it will have but \$8,000 to pay \$40,000 of debts created by crediting its loans as deposits, and cannot meet its engagements.

¹See under "Reserves" for the reserve requirements of banks in the Federal System.

By experience it has been found that a reserve of about twenty-five per cent. is ample in the large cities to carry the banks in normal times, and the National Banking Act so required; but the Federal Reserve Act makes the proportion eighteen per cent. which, by virtue of the rediscount machinery, is considered ample; but the principle is the same—a cash fund from which to meet the daily demands of the depositors. In Europe there is no obligatory reserve, this being left to the judgment of the bankers; but how much reserve to carry and do full justice to the bank (the reserve is a source of loss) and still be within the limits of safety is the art of banking.

It is when the deposits are fictitiously increased by making too free credits, extending credit unwisely, and allowing the reserve to decrease until it becomes out of all proportion to the debts that danger accrues. We then have inflation. It has been ascertained that the danger point under past conditions was about twenty-one per cent.; that is, when the reserve stood at about twenty-one per cent. for the country as a whole it was too low and loans should then be restricted, so that deposits would decrease until the margin was greater. What the Federal Reserve Banks will do in alleviating all such reserve evils remains to be seen.

LIQUID LOANS

The secret of sound banking is to have a steady stream of money coming in by way of maturing loans, so that the constant stream of obligations falling due daily by reason of the demands of the checking depositors, may be met. A demand obligation cannot be met by a time security, and only as the bank keeps its funds liquid—that is, flowing in and out—can it meet every demand made on it without hardship.

Banks all over the country when in funds send them to New York to their correspondents, for lending in the market, or on joint account. The New York bank may lend for the country bank's account in the market, or lend for its own account, and pay interest; but whatever the method, the money finds its way into collateral loans secured by stocks and bonds, and when money is plentiful and cheap we have an era of speculation; and if for any reason the loans must

officers or the discount committee. Usually an officer is designated to pass on the offerings, and the committee sanctions his judgment either by attesting the offering book or with some mark on the discount register to indicate their approval of the loan. Loans are sometimes submitted in a written report to the board and ratified by making the offerings and acceptances part of the board records.

COLLATERAL LOANS

If the maker of the note wishes to reinforce his credit, he will offer the bank collateral, i. e., he will lodge with it certain stocks and bonds or other securities to support the loan, and these the bank may sell in the event of the maker failing to pay his note as agreed at the appointed time. We, therefore, have the collateral loan. And in the latter case, it is not the borrower's credit that is the pivotal point, but the quality of the collateral.

The collateral loan is made for two purposes: First, to allow the broker (most collateral loans are to brokers and dealers in securities) to buy and sell with the funds of the bank, using but little of his own capital. In fact, a broker with good banking connections can buy and sell with almost no capital at all. And secondly, to permit security holders to use the capital invested therein for a time (or permanently) without selling the security. It is profitable to borrow on a bond that pays five per cent. at two or three per cent. even with the margin. Thus the bond pays, say \$50 interest yearly. The owner pledges it with a bank for a \$900 loan and pays four per cent., or \$36 a year, and he is \$14 ahead on the transaction. He has had the use of part of the money and at the same time has drawn interest on all. Only when he must pay more than five per cent. will it be more profitable to sell, even at cost, than to borrow. And with a rate of two per cent. possible in New York during ordinary times, to pledge a bond or stock that nets five per cent. and only pay two per cent. is distinctly profitable. By our system of centering money in New York we have specialized in Wall Street loans and made them the liquid asset of the country.

A B C D

DEMAND

Date _____

								Amount	
Rate									
Original	Present	COLLATERALS						Price	Value

STREET DEMAND

Date _____

								Amount	
Rate									
Original	Present	COLLATERALS						Price	Value

LISTED AND UNLISTED SECURITIES

In making a collateral loan several elements enter, the important ones being: The collateral, what is it? What is it worth? Is it "straight" or "mixed"; listed or unlisted; high grade or low grade, or doubtful? Has it a ready market, and broad? A bank president when urged to equip his new building with a vault of the heaviest armor plate, replied: "It is not armor plate that is wanted, but a vault that will keep out bad collateral."

Securities pledged as collateral are of two main classes: listed and unlisted. The former includes all securities dealt in on the exchanges whose value may be ascertained from the published figures of stock market quotations. Unlisted securities are those that are dealt in on the "Curb," and, therefore, quoted in the curb quotations, and those other securities issued by companies and corporations everywhere, some good, very good, some half good and some all bad. Some can be sold in a few hours, or in a few minutes, and some couldn't be given away. This is not to say that unlisted stocks are all bad or any of them bad, for such high-grade stocks as Standard Oil are unlisted and are of the very best; but the reference is to mining stocks, oil stocks, and others of like character whose value is undeterminable by any process known to the banking fraternity. Municipal bonds are generally unlisted, except a few issues such as New York City, State of New York, Government bonds, and the like. But a mixture of quickly salable bonds and high-grade stocks makes the most desirable collateral.

The unlisted bonds and stocks often pay interest and dividends regularly and are of intrinsic value, but not being listed on any of the exchanges, command a limited market, so that in times of stress they are likely to join that class known as "indigestible." To handle this kind of collateral calls for keen judgment, for otherwise the necessity may arise at any time of carrying such securities for a long period pending an opportunity to unload.

Then again there are certain good listed stocks of intrinsic value, but with only a moderately active market, the selling price of which may be materially affected if any large quantity is offered for sale. The question of margin enters quite largely into consideration on taking loans

on collateral of this class, and it should be the policy of one finding it necessary to liquidate such loans to put out the securities in small blocks.

THE MARGIN

It is impossible to express a hard and fast rule governing securities pledged for loans, for the reason that the nature of the loan is dependent upon the contract between the borrower and the lender. As a general rule twenty per cent. margin is required to be kept good. In some cases even greater margins are required. Where high-grade bonds form the security a much smaller margin is exacted. During the panic days of 1907, forty per cent. margin was in certain cases demanded by the banks on loans. Some lenders insist on all dividend-paying railroads, others are willing to lend on various mixtures of railroads and industrials, and this is the general rule. The ordinary Wall Street loan is secured by about sixty per cent. railroads and forty per cent. industrials, sometimes half and half, sometimes seventy and thirty per cent. respectively, and sometimes all industrials. Generally in the case of a preponderance of industrials a slight advance over the current rate of interest is asked.

The reason why mixed collateral is preferred is the fact that in case the loan has to be called and the security sold, there will not be forced on the market a large quantity of one stock, thus depressing the price.

The higher the quality of the stock the less margin may be carried with safety. Thus, on a New York City bond, a loan may be made up to nearly the full face value, while in a more speculative stock, a larger margin is necessary. High-grade railroad bonds are of more stable nature than railroad stocks, and the margin in one case would be less than in the other. In times of stringency and market activity values fluctuate widely in most stocks, particularly the active stocks, and a wider margin is required if safety is to be assured than if a high-class bond were pledged.

In Kirkbride and Sterret's Modern Trust Company it is said: "In New York two tests are applied to a collateral loan, the first requiring that the value of the securities must have a margin equal to twenty per cent. above the amount of the loan, and the second that the loan must have ten

points margin. That is, the amount loaned must be \$10 per share less than the market value of the stock. This is reckoned by dividing the number of shares of stock (or if bonds \$10,000 are equivalent to one hundred shares of stock) into the margin.

"For example, if there were 2,000 shares of mixed stock in a loan of \$100,000, divide this number of shares into \$20,000 (the twenty per cent. margin) and the result shows the average margin of ten points on each share held.

"If the ten-point rule is strictly adhered to it has the

\$800⁰⁰
Thirty (30) days after date we, the signers, endorers, sureties, and all of us, in solidio, promise to pay to the order of
 SHREVEPORT, LA. *Nov 2* 191*3*
 THE CONTINENTAL BANK & TRUST COMPANY, at their banking house in Shreveport, Louisiana, the sum of
Eight Hundred DOLLARS
 for value received, with interest thereon, at the rate of eight per cent per annum from maturity until paid.

This note is secured by pledge and delivery of the securities mentioned on the reverse hereof. The maker of this note hereby agrees, within twenty-four hours from demand on him to that effect made by the holder of this note, to cover such decline, and to furnish additional securities when so called for, shall AT ONCE MATURE this note and pledge.

Should this note not BE PAID AT MATURITY, or when it BECOMES DUE by failure to furnish additional securities as above provided, or for any other reason, the then holder thereof is hereby authorized TO SELL the pledged securities, or to employ a Private Agent without recourse to Judicial Proceedings, and is hereby irrevocably authorized to transfer any shares of stock, or other securities, in whole or in part, to the said Private Agent, or to any other person, under such Public or Private sale. The proceeds of the said pledged securities shall be applied (1) to the payment of all costs and commissions for selling; (2) to the payment of this note in principal and interest and the ten per cent. attorney's fees, before stipulated herein, to the payment of any other indebtedness, then due or thereafter to become due, by the maker of this note to the said CONTINENTAL BANK & TRUST COMPANY, up to the sum of \$100,000. The holder of this note shall have the right to purchase the pledged securities at their market value, if there is any market value, or at any judicial or auction sale thereof. Should this note not be paid at maturity or when due as above, or should it become necessary to employ an attorney to make or enforce the same, or should this note be placed in the hands of an attorney for collection, the maker shall pay the fees for such attorney, which are fixed at 10 per cent. on the amount then due on this note, which attorney's fees are secured by the pledge of this note, or when otherwise due, as above provided, any money on deposit or otherwise to the credit of the maker of this note with the said CONTINENTAL BANK & TRUST COMPANY, shall at once stand applied to the payment of this note, unless it be otherwise paid. The signers and endorers severally waive presentation for payment, protest and notice of protest, and non-payment of this note.

DUE *4/1* *E J Bailey*

COLLATERAL TIME NOTE

effect of discriminating against low-priced, non-dividend-paying stocks, while the twenty per cent. clause requires an ample margin on high-priced stocks. There are a few institutions in New York that require nearly fifteen points with the twenty per cent. margin, and some which do not adhere strictly to the ten per cent. requirement."

The usual margin required is from twenty to twenty-five per cent.; that is, on a hundred dollars' worth of stock from seventy-five to eighty dollars would be loaned.

"WATCHING THE TICKER"

In a large and active bank making a specialty of collateral loans, there is careful watch kept over all securities on which the bank loans. In a room with a stock ticker and other news agency reports there is a clerk who has a record

\$..... NEW YORK, ... 191.....

.....after date, without grace, the undersigned, for value received, promise to pay to the Guaranty Trust Company of New York, or order, at the office of said Trust Company in the City of New York, in funds current at the New York Clearing House,

..... Dollars,

with interest at the rate of..... per cent per annum, payable quarterly on the first days of January, April, July and October, having deposited with said Trust Company as collateral security for the payment of this or any other liability or liabilities of the undersigned to the Trust Company, due or to become due, or which may hereafter be contracted or existing, including as well promissory notes, bills of exchange, and other evidences of indebtedness made, endorsed or accepted by the undersigned and purchased or owned by the Trust Company, the following property, viz.:

The undersigned hereby agree.....to deposit with the Trust Company such additional collateral security as the Trust Company may from time to time demand, and also hereby give.....to the Trust Company a lien for the amount of all the liabilities aforesaid upon all the property of the undersigned at any time coming into the possession of the Trust Company, and also upon any balance of the deposit account of the undersigned with the Trust Company.

On the non-performance of the foregoing agreements as to furnishing additional collateral, or upon the non-payment of any of the above-mentioned liabilities, then and in either such case the Trust Company is hereby authorized to sell, assign and deliver, the said property, or any substitutes therefor, or any additions thereto, or any such other property, at such time or times and in such several parts or parcels as the Trust Company or either of its officers may decide, and to sell the whole or any of said parts or parcels, either at any broker's board or at public or private sale, either for cash, upon credit or for future delivery, at the option of the Trust Company, or of any of its officers, without advertisement, or notice, which are hereby expressly waived. Upon the non-payment or the non-fulfillment of any of the conditions of this note, then the whole or any designated part of the liabilities of the undersigned to the Trust Company shall mature at the election of the Trust Company by presentation thereof for payment. In case of any sale by the Trust Company, of any of said property on credit or for future delivery, the property sold shall be retained by the Trust Company until the selling price is paid by the purchaser, but the Trust Company shall incur no liability in case of failure of the purchaser to make up and pay for the property so sold. In case of any such failure the property may be again sold. At any sale hereunder the Trust Company may itself purchase the whole or any part of the property sold, free from all right of redemption on the part of the undersigned, which is hereby waived and released. In the case of any sale the Trust Company may first deduct all the expenses for collection, sale, and delivery of the property so sold, and any other expenses incurred by the Trust Company in connection with such sale; and may then apply the residue to any one, or more, or all, of the said liabilities, whether due or not due, returning the overplus, if any, to the undersigned, who shall remain liable to the Trust Company for any deficiency arising upon any such sale. The undersigned do hereby further authorize the Trust Company at its option at any time, to appropriate and apply to the payment of any of said liabilities, whether now existing or hereafter contracted, any and all moneys or other property now or hereafter in the hands of the Trust Company on deposit or otherwise, to the credit of or belonging to the undersigned, whether the said liabilities are then due or not due. The undersigned further agree that, upon any transfer of this note, the Trust Company may deliver the property held as security, or any part thereof, to the transferee, who shall thereupon become vested with all the powers and rights above given to the Trust Company in respect thereto, and the Trust Company shall thereafter be forever relieved and fully discharged from any liability or responsibility in the matter.

COLLATERAL NOTE

of all collateral loaned upon and the price at which the loan was made and the name of the borrower. As changes occur in the market, notation is made and when the margin gets too close additional security is called for.

THE BORROWER

The second element to consider is the standing of the borrower. If the borrower is doubtful, the bank may have

to sell its collateral, and this it does not desire to do. It makes a loan hoping to receive the funds back. It does not want the proceeds of collateral. It dislikes to go on the auction block. If not reliable, the borrower may skirmish for time, and find some technicality to prevent a sale. It may mean trouble, and trouble the bank does not want.

TITLE TO THE COLLATERAL—"GOOD DELIVERY"

It is important that title to the collateral be vested in the borrower and that it be conveyed in proper form to the bank, so that it becomes "good delivery"—that is, will be transferred upon the books of the issuing corporation or its fiscal agent. The rules of the New York Stock Exchange are said to be the most strict of any in the country and if transfer is in accordance therewith, it will probably pass anywhere. If title is defective the bank will have trouble in collecting its money. If it holds bogus stocks and bonds it has no collateral at all. What is good delivery depends upon the usages of the trade and the rules and regulations of the stock exchange in listed securities, and in the case of unlisted securities, the rules and regulations of the issuing company.

Certificates of stock received as security should be dated, signed, sealed and duly attested by the registrar. Powers of attorney upon the back of certificates should be carefully filled in, leaving the name of attorney and of the party to whom the transfer shall be made in blank.

The signature to the power must correspond with the name upon the face of the certificate and should be witnessed. Bonds offered as collateral should be closely scanned to note if registered. If so, power of attorney must accompany. Signature, date, seal and next maturing coupon must all be in place.

FORM OF COLLATERAL NOTE

To those who are in the habit of handling stocks and bonds, it may seem superfluous to consider for a moment any questions pertaining to the form of note or power of attorney used in connection with collateral loans; but we

shall take it for granted that there are some to whom a few suggestions will not go amiss.

The form of note should provide for a call of margin, with the privilege to sell the collateral in event of the failure of the borrower to maintain the margin; it is also advisable to have a clause in the obligation to cover any direct or contingent liability.

Care should be taken in the execution of the power of attorney in order that certificates of stock may be a good delivery; the name of a bank or any of its officers should not be included in the assignment, either as transferee or attorney. The signature to assignments must be technically correct; i. e., it must correspond with the name as written upon the face of the certificate or bond in every particular, without alteration or enlargement or any change whatever.

Certificates in the name of a married woman should not be taken unless the husband joins in the execution of the assignment and a joint acknowledgment be taken before a notary public.

Several or more powers of attorney should be required when a large block of stock is pledged, as considerable difficulty may arise in selling the collateral if the whole block must be sold.

It should be the habit of the one intrusted with the handling of collaterals to daily follow quotations closely, and yet there are many instances where sales are "washed" to bolster values and consequently create fictitious quotations; generally, however, the public expression, as represented by sales on the stock exchange, is a good barometer of actual values.

To those who desire to become competent to look after the collaterals I would advise, in the first place, careful reading of the best newspapers and journals, whose equipment is especially adapted to wants of investors, and secondly, actual contact in the practical work of the department wherein you get accustomed to handling the various stock certificates, bonds, etc.²

TIME LOANS

Aside from the demand note, there are two main forms of notes used in banking, the first of which promises to pay

²Louis N. Spielberger in *The Bankers Magazine*.

a certain sum a specified number of days or months after date. The other promises to pay the amount on a certain date. In the first case the maturity must be figured, and due allowance made for the different rules regarding Saturdays, Sundays and holidays in the different States, as well as days of grace, now fast becoming a thing of the past, as they should be. Notes are usually made payable at some bank and must be presented there. Bankers' guides are published giving the laws of the States regarding grace, protest, holidays, etc., for use in timing notes. These, of course, are part, and a necessary part, of every bank's outfit.

THE BOOKKEEPING OF THE LOAN

As soon as the loan or the discount is accepted the loan records begin to take shape. The note must be made out and signed. If it is already in signed form, as in the case of a discount, it must be properly indorsed. If it is a collateral note with finely printed terms, the bank will insist that the note be on its own form. If securities are to be delivered, they must be brought in and examined.

Having the note in hand we must determine: when it matures; the value at maturity, including interest, if interest is to run; the time in days until day of payment, for interest calculations; the interest or the discount, and the proceeds. Having determined the proceeds the amount is credited to the customer, the interest to interest account, and the face amount charged to loans and discounts. Tickets for the various entries are sent to the several departments; or in the case of a small bank put through the journal records. We have thus kept the equilibrium heretofore mentioned, for, supposing the note to be for \$100, six months to run, at six per cent., we would credit the depositor \$97, interest \$3, and charge discounts \$100, maintaining the balance.

In timing the item, the due date is placed upon it in some conspicuous place, generally provided for in notes. If interest is to be added this is figured and noted usually over or under the figures in red ink.

If cash is paid for the loan, cashier's check is drawn, New York draft issued, or the cash itself may be paid. But the more frequent way in the case of home loans would be to pass the same to the credit of the borrower. But in buy-

DISCOUNT

Form A					
DATE OF NOTE	Our Number	Their Number	DRAWER OR MAKER	DRAWEE OR ENDORSER	WHERE PAYABLE
	01				
	02				
	03				
	04				
	05				

DISCOUNT

ing commercial paper, draft is, of course, sent to the broker in payment of the paper purchased.

It is important that the laws of the various States as to holidays be known in timing notes, for while days of grace are generally abolished, holidays differ and the laws relative to presentment of paper are not uniform. In some, the paper is due the day before a holiday and in others the day after. Paper due on Sunday is, as a rule, payable on Monday. The uniform Negotiable Instruments Act will be a safe guide in this respect.

The next step is to enter the item on the discount register—the “history book” of the discount department—recording as one banker puts it “the birth of every loan and its death.”

The loan register contains full details as to maker, indorser, date, time, where due, maturity, amount, rate of interest, interest or discount, exchange, and other details that are necessary to completely describe the paper.

This discount register is a book of original entry and constitutes one of the most important records of the bank.

MATURITY RECORD

Record is also kept of the maturity of the loans by a maturity register, which classifies the notes according to due dates. After entry on the discount register, it is entered on the maturity book, first that it may have attention when due, and also to ascertain how much is maturing each day for reinvestment purposes. By referring to this book, the loan or discount department may tell at a glance what notes are coming due, and how much will be in hand for reinvestment. From this record notes are turned over to the collection department for collection, if not presented by the loan or discount department through messengers. The maturity book

REGISTER

TIME	When Discounted	WHEN DUE	AMOUNT	Amount Discount	AMOUNT PAID	WHEN PAID	REMARKS

REGISTER

is a most important record, for it checks the notes falling due, and keeps the payments up to date. Presentment is a most, if not the most, important detail in the discount department, and failure to present a note may lead to losses. Simpler things than this have brought litigation, and some debtors are only too glad for an opportunity to escape liability.

When the loan is properly recorded, and classified as to due date, it is filed in a document case, constructed especially for this purpose, and divided into days and months. Special trucks are sometimes provided for these maturity records, the truck being wheeled into the vault at night. The notes therein contained are exceedingly valuable, for if lost or destroyed endless confusion would result.

It is suggested that the bank's own paper—paper of its own customers running to it—be kept in another ink to distinguish from the paper of customers discounted for them.

THE BORROWER'S LIABILITY

Thus far we have discounted the note, sent the credits and the debits to the proper departments, or made the proper entries, informed ourselves when to look for payment, and there remains to discover how much the discounter or borrower owes on similar obligations. This is recorded on liability cards or ledgers, the record including what the party owes directly and contingently to the bank, and is a useful and necessary part of the bank's information in making loans.

It becomes exceedingly important that the bank follow the law in the matter of loans, in that it shall not lend to any one party or interest more than a certain percentage of its capital, or capital and surplus. The law is strict in this

LOAN DEPARTMENT—PROOF SHEET

For				191			
DEBITS			Folio	ACCOUNT	CREDITS		
				Debit Clerk			
				Credit Clerk			
				Collection Department			
				Coupon Department			
				Paying Teller			
				Receiving Teller			
				Trust Department			
				Reorganization Department			
				Securities Department			
				Foreign Department			
				Total Departmental Balances			
				Demand Loans			
				Time			
				Bills Purchased			
				Customers' Loans			
				Accrued Interest Receivable			
				Expenses			
				Interest Due Customers			
				Customers' Collateral			
				Commissions			
				Treasurer's Checks			
				Fifth Avenue Branch			
				Loan Balances			
				Demand	\$		
				Time	\$		
				Customers'			

PROOF SHEET—LOAN DEPARTMENT

and must be obeyed, for many banks have come to grief through overloaning to one party, and it is both good banking and good business to scatter the risks, and not put too many eggs in one basket.

The discount register will show how much the bank has

LOCATION

PRESENT RATE

NAME _____

ACCOUNT OPENED

[illegible]

AVERAGE BALANCE AND AVERAGE LOAN CARD

loaned, but it does not show how much to A, B and C, and we must, therefore, segregate these items so that the liability of each borrower, direct and contingent, shall be known. This is important, not only that the law may be obeyed, but

SHEET No. _____

UNION BANK & TRUST CO., JACKSON, TENN.

NAME _____

[illegible]

LIABILITY LEDGER

also that the bank may be within the limits of safety; and unless it can follow the changing liability of the borrower from day to day will be all at sea as to its risks. This liability is of three classes: (a) Direct; (b) as indorser, and (c) as discounter. With a system of recording this liability

ACCOUNT NO. _____

SHEET NO. 100-100000

[illegible]

LIABILITY BOOK

SINGLE

DISCOUNT REGISTER WITH PROVISION FOR RECORDING LINE OF CREDIT AND OTHER LIABILITY

Guaranty Trust Company of New York		
Fifth Avenue Branch Fifth Avenue and 43rd. Street	140 Broadway	London Office 33 Lombard Street, E. C.
New York, _____ 191____		
Dear Sirs: We beg to advise the following substitutions, which were made to-day in your loans, as listed below: Yours very truly, Guaranty Trust Company of New York W. C. EDWARDS, Treasurer By _____		
NAME	WITHDRAWN	RECEIVED

NOTICE OF SUBSTITUTIONS IN COLLATERAL LOAN

should not loan all its funds to a single line, such as millinery, dry goods, leather, manufacturers, etc., for many a bank has gone down by not heeding the truth of the maxim above quoted.

Some banks, in order to keep track of their collateral loans, have an index arrangement showing how much they have loaned on each class of stocks or bonds, and to whom the loan is made. This is to prevent a bank from becoming overloaned on one particular stock. But a good loan clerk will at least keep a mental memorandum of the prevalence of a certain stock and guide his actions accordingly.

In collateral loans the note, properly executed, should be placed in a heavy manilla envelope. On the envelope is recorded the number of the loan, borrower's name, date, amount, rate per cent., a full description of the securities and the value. The value should be kept in lead pencil, so it can be readily changed. All envelopes are filed alphabetically. A record of the loan is also made in a loan book,

which is an account of each day's loans. This book goes to the board of directors for their examination. A record is also made on a card, which is practically a duplicate of the envelope, except there are spaces for the change in interest rates, and for part payments. This information may be kept on the envelope if desired.

SUBSTITUTIONS

In collateral loans substitutions are allowed from time to time, as the stocks are sold and others bought. When a broker sells stocks he must deliver them, and if he has them on loan he withdraws them from the loan and substitutes others. The loan clerk is familiar with the terms of the loan, knows what stocks to accept and what to reject to keep the margin good, and follows the trend of the market closely, so that the margin will be maintained at all times. In his desire to make money for the bank, he must analyze with minute care stocks that have a narrow market, stocks that are subject to wide fluctuations and stocks of doubtful intrinsic value brought into prominence through manipulation. If stocks of this description are accepted by the loan clerk he should see to it that they form only a small percentage of the collateral. In making substitutions, "substitution sheets" are used. These are filed with the securities and show the authority for making changes in the loan collateral.

As substitutions are made they are added and the old records crossed off. If only part of the securities are removed, the figures are changed. The intent of the record is to keep track of all the securities held on the loan and that the list shall be as in the envelope and the market values shown either on a card or on the envelope itself.

Collateral loans are made frequently through brokers. As soon as the bank ascertains what it will have to loan for the day, after receiving the morning's clearings, it will communicate with brokers and offer them funds at certain rates; or, it may place the same in the hands of brokers on the stock exchange floor to be loaned out to clients, the borrower paying a small commission for the favor.

WHEN THE DUE DATE ARRIVES

When the due date arrives, the note must be paid, or renewed, and it, therefore, follows that we must turn it into money or into a new obligation. Custom decrees that makers be given ten days' notice of maturing paper and it is necessary that the maturing notes be sent to the correspondent for collection in due time so that such notice may be given. In the case of home paper, of course, the notices can be sent each day for the maturities of ten days in advance. By con-

PLEASE BE PROMPT
NO DAYS OF GRACE. Don't Forget the Time and Place

CONTINENTAL BANK & TRUST CO.

SHREVEPORT, LA.

<i>We hold your Note for</i>	- - -	\$	1,000.00
<i>Which will be due</i>	May 22, 1913	<i>Interest, \$</i>	20.00
<i>Endorsed by</i>	John Jones & Coll	<i>Total, \$</i>	1,020.00

Mr. Jas. Smith,
1014 Texas Street,
C i t y .

SPECIAL NOTICE.—This note is due on the within date, and NOT the next day or the next week, and your credit and standing with this Bank depends largely on the promptness with which you take the care of your obligations, we will not stand for past due paper.

NOTICE TO BORROWER OF MATURING NOTE

sulting the maturity tickler out-of-town items may be forwarded and notation made in the proper space. Some banks keep the foreign items separately.

In clearing-house cities notes due are sent through the clearing-house, unless by custom they are collected by messenger. For instance, in Boston, notes of over \$2,500 are presented through messengers, while under that amount through the clearing-house.

Notes paid or charged to the customer's account are credited to bills receivable, and the balance of the discount register, maturity tickler and total of the notes themselves should agree with the balance of the controlling account on the general ledger. Items in the form of notes sent out for collec-

tion are charged to the collection department as any other collection. Notes falling due in other places may be charged to the bank to which they are sent, to be charged back if not paid, if the bank be a correspondent, or charged to the transit account as a collection item to be collected and credit passed, or sent out on memorandum. As soon as the note leaves the loan department it is credited to the bills receivable account, and charged to "collections" or "transit account," and when payment is made or credit passed upon advice of payment, the transit account or collection account is credited, and the collecting bank charged.

In discounting notes payable out of town, the exchange is taken out at the time of discount, and is no longer a charge against the collection of the note. If the item is protested, it must be taken up by the borrower and the fees paid in addition; or if payment cannot be obtained at once, it is carried in a suspense account for later adjustment.

UNEARNED DISCOUNT

When the discount is made, the interest is deducted and credited as an earning. This, of course, makes the period in which the note is discounted show an earning that may lap over into another period. For instance: A loan of \$100 is made March 1st, due July 1st. The dividend figures are made up on April 1st. To consider the interest for the full time as an earning for the period ending April 1st is to deceive ourselves, and only that part of the earnings which properly belong in the period should be reckoned as an earning. Therefore the interest for March only is properly part of the earnings for the period, and all well-managed banks endeavor to so apportion interest earnings.

Likewise, loans where the interest is paid at maturity must have the earnings for the time they have run until dividend time entered as accrued interest, thereby swelling the earnings of the bank by the amount due but unpaid. These accruals can only be determined by taking each note and apportioning the interest over the term, entering under each month the interest that is earned during the month, so that at any time the true earning power may be known.

Mr. Howard M. Jefferson, auditor of the New York Federal Reserve Bank, has made a specialty of accrued in-

Dr. INTEREST ACCRUED Cr.

Date	Memoranda	Amount	Date	Memoranda	Amount
June 27	Int. Acc'd Rec.	\$4 44	June 30	Cash	\$ 13 03
" 28	" " "	13 47	July 5	"	154 43
" 29	" " "	17 64			
" 30	" " "	13 19			
July 1	" " "	28 19			
" 4	" " "	90 83			
	Total	\$167 76		Total	\$167 76

FORM B

Note: The credit entry of \$13.03 should be \$13.33. Form was photographed as Mr. Jefferson had it.—W. H. K., Jr.

Dr. INTEREST ACCRUED RECEIVABLE Cr.

Date	Memoranda	Amount	Date	Memoranda	Amount
June 30	Profit and Loss	\$48 74	June 27	Int. Accrued	\$4. 44
			" 28	" "	13. 47
			" 29	" "	17. 64
			" 30	" "	13. 19
	Total	\$48 74		Total	\$48. 74
			July 1	Int. Accrued	\$28. 19
			" 4	" "	90. 83

FORM C

terest receivable and payable and in the text book on "Banking" of the Alexander Hamilton Institute course says in this respect:

"A very simple method of accruing interest receivable day by day on loans will be explained in detail. Application of this principle may be made to bonds and mortgages, stocks and bonds, interest payable on accounts and certificates of deposit.

"A columnarized sheet as shown in Form A will do for the daily record. Accounts should be set up in the general ledger as shown in Forms B and C. The accounts shown in Forms D and E will already be on the ledger. We will carry the work over the end of the fiscal period to show how the books would be closed and will, therefore, begin our record on Monday, June 27, and run to Wednesday, July 6, closing the books on June 30.

"The following transactions take place: June 27, loans made, \$20,000 at five per cent and \$10,000 at six per cent. These loans should be entered as per Form A. At the end of the day, which is equal to the opening of the day following, 'interest accrued' is charged and 'interest accrued receivable' is credited with one day's interest on the loans made at the respective rates.

\$20,000 at 5% for one day.....	\$2.77
10,000 at 6% for one day.....	1.67
Total (See Forms B and C).....	<u>\$4.44</u>

"If the loans are not very active, the same sheet may be used from day to day. If very active it will be better to open a new sheet each day with the balances outstanding at the various rates on the day previous.

"On the 28th two new loans were made, \$50,000 at four per cent. and \$25,000 at five per cent. These are entered in the proper columns on the daily sheet. At the close of the day 'interest accrued' is charged and 'interest accrued receivable' is credited with one day's interest on the total amount of loans held by the bank at the various rates as follows:

\$50,000 at 4% for one day.....	\$5.55
45,000 at 5% for one day.....	6.25
10,000 at 6% for one day.....	1.67
Total (See Forms B and C).....	<u>\$13.47</u>

"On the 29th three loans of \$10,000 each are made at four, five and six per cent. respectively and entries made as per the figures. The accrued accounts receive the entries on

\$60,000 at 4% for one day.....	\$6.67
55,000 at 5% for one day.....	7.64
20,000 at 6% for one day.....	3.33
Total (See Forms B and C).....	\$17.64

"On the 30th two loans are paid with interest, \$20,000 at five per cent., the company receiving three days' interest amounting to \$8.33, and \$10,000 at six per cent., the company receiving three days' interest amounting to \$5.00. These payments are entered on the daily sheet in red and deducted from the balance of the previous day. The \$13.33 received as interest is charged to 'cash' and credited to 'interest accrued' as per Forms B and D. The accrued accounts receive the usual charges and credits for the interest on the balances in the loans at the different rates:

\$60,000 at 4% for one day.....	\$6.67
35,000 at 5% for one day.....	4.86
10,000 at 6% for one day.....	1.66
Total (See Forms B and C).....	\$13.19

"At this juncture the books are closed for the six months. 'Interest accrued receivable' is closed into 'profit and loss.'

"On July 1 two new loans are made, \$75,000 at four per cent. and \$40,000 at six per cent. The usual entries are made in the accrued accounts:

\$135,000 at 4% for one day.....	\$15.00
35,000 at 5% for one day.....	4.86
50,000 at 6% for one day.....	8.33
Total (See Forms B and C).....	\$28.19

"The second, being Saturday, but one loan is made, \$15,000 at five per cent. Sunday and Monday being holidays it will be necessary to accrue for three days instead of one:

\$135,000 at 4% for three days.....	\$45.00
50,000 at 5% for three days.....	20.83
50,000 at 6% for three days.....	25.00
Total (See Forms B and C).....	\$90.83

DR.			CASH			CR.		
Date		Memoranda	Amount		Date	Memoranda	Amount	
June 30		Interest Accrued	\$ 13 33					
July 5		" "	154 43					

FORM D

DR.			PROFIT AND LOSS			CR.		
Date		Memoranda	Amount		Date	Memoranda	Amount	
					June 30	Interest Acc'd Receivable	\$48 74	

FORM E

"On the fifth all loans are paid with interest as follows:

\$50,000 seven days at 4%	\$38.89
25,000 seven days at 5%	24.31
10,000 six days at 4%	6.66
10,000 six days at 5%	8.33
10,000 six days at 6%	10.00
75,000 four days at 4%	33.33
40,000 four days at 6%	26.66
15,000 three days at 5%	6.25
\$235,000	\$154.43

"The interest received, \$154.43, is charged to 'cash' and credited to 'interest accrued,' closing the latter.

"The paid loans are entered in red on the daily sheet and deducted, leaving no loans on which to accrue interest at the close of the fifth day.

"It is a little difficult to apply this system to deposits upon which interest is paid on average daily balances, but even this may be accomplished if these accounts are segregated from the non-interest bearing. It may be applied with no trouble at all to certificates of deposit and other special accounts."

ACCOUNTS RECEIVABLE AS COLLATERAL

There is a class of collateral loans that is coming to be common in banking, but more especially in mercantile circles, based upon accounts receivable. Where a merchant is not in the best of credit, and has no better security to offer, and cannot borrow on his own name unsecured, and does not take notes from his debtors, he may pledge his accounts receivable, meaning his book accounts. Next to cash these are his most liquid asset and his best security (if good) and some banks will loan on the strength of these accounts. They are usually assigned to the lending bank, and notice served on the debtors that the accounts have been pledged and that payment must be made to the bank instead of the merchant. At times the accounts are merely pledged and collections made in the usual way.

There are "commercial bankers" who make a business of loaning on, or, to speak more correctly, buying, these accounts. There is also what is known as the "factor," or commission merchant, who not only sells goods for customers and mills for whom he acts as selling agent, but also finances manufacturing operations. It is done largely through the medium of the accounts receivable. A simple illustration will show how these operations are carried on. Let us suppose a manufacturer of woolen cloth sells a bill of goods to a well-known clothing firm. The terms of the sale are three months, with a discount. The manufacturer cannot wait that long for his money, being short of capital funds, and has no banking connection that will loan on his note or on his accounts receivable. He, therefore, arranges with the factor to buy this account, and the factor will do so. The latter operates a very finely organized credit department that keeps in touch with all leading merchants the country over and can judge the credit risk with considerable accuracy. The factor will advance the manufacturer, say, eighty

for the shrinkage inevitable in all such matters and when made with a reliable firm, and ample margin allowed, are a good security, but not in general favor.

INTEREST

The banking custom, sanctioned by law, is to consider 360 days to the year, thirty days to the month and charge discount for every day from date of credit to date of maturity, excluding the former and including the latter.

The rate of interest changes frequently on "Street Loans." Payment of interest is usually made monthly. The interest can be calculated by multiplying the rate per cent. by the number of the days it stood at that rate, or by the use of interest tables.

Find total of these products, add four decimal places, then divide by thirty-six. The answer will be the interest on \$100,000.00 in dollars and cents. Thus, \$100,000.00 loaned Oct. 1, 1910, at three per cent., changes Oct. 4 to two and one-half, Oct. 8 to four per cent., and Oct. 10 to three and one-half, paid Oct. 15, 1910:

Oct. 1 to 4 at 3	per cent., 3 days.....	\$9.00
Oct. 4 to 8 at $2\frac{1}{2}$	per cent., 4 days.....	10.00
Oct. 8 to 10 at 4	per cent., 2 days.....	8.00
Oct. 10 to 15 at $3\frac{1}{2}$	per cent., 5 days.....	17.50
		\$44.50

36)44.5000(123.61
36''''

85

72

130

108

220

216

40

36

4

Some banks keep a daily skeleton balance ledger of the loans at the rate per cent. the loans are made, posting the new loans and payments under the rate per cent. This

Daily Balances

of

with Guaranty Trust Company of New York.

Interest Account for Month ending

191

		<i>Dr.</i>		<i>Cr.</i>	
26					
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25					
Interest					

INTEREST STATEMENT BASED ON DAILY BALANCES

enables the bank to tell at once just at what rates all the loans stand.³

In discounting interest-bearing instruments, it is the custom to discount the interest as well as the principal. A note of \$1,000 running one year and bearing interest at six per cent. amounts to \$1,060, but when discounted the amount of the proceeds would be \$996.40 and not \$1,000.

It is a good custom each week to make out a maturity sheet, showing a list of notes due during the following week for which a part renewal may be asked. Record on this sheet makers and indorsers, amount, when due, total due on own paper and receivables, also the average balance for the past six months. This enables the officers to look the matter up before the request for renewal is made.

Occasionally the officers or directors want to know the amount of unearned interest, that is, the amount that would be charged to profit and loss if every note was rebated. First find the average rate by multiplying each rate by the total discounted at that rate, add the results together and divide by the total amount under discount. Then find the average time by multiplying total of each day's notes by number of days they have to run; add the results of these totals, and divide by total amount under discount. Having the average rate, and the average time, you can easily tell amount of unearned interest.

In a book with an index, having spaces ruled off on each page, keep a profit and loss record of unpaid matured discounted paper. Have each space numbered. In these spaces record a full description of each item—to whom it has been turned over for collection, if any part payment is made, etc.

The items themselves, or a copy, if they are out of your possession, should be placed in envelopes and these envelopes marked with the same number as the space in the profit and loss record. These envelopes should be filed numerically so the paper can be readily located, however many years it may be old. The envelopes save the items from wear and tear.⁴

It is not the custom for banks to give receipts for collateral, for the receipt would be evidence of the existence of the

³Wm. M. Rosendale, Assistant Cashier Market & Fulton National Bank, New York, before Pittsburgh Chapter, A. I. B.

⁴Wm. M. Rosendale in Bankers Magazine.

collateral and the ownership in the borrower, and might lead to hypothecation and other irregularities. And where substitutions are frequently made, as is the case in stock exchange loans, these receipts would be a nuisance and are given if at all only under protest and are most generally refused.

PAYMENT OF CALL LOANS

The New York Stock Exchange has no set rules governing loans. The payment of call loans may be demanded up to one o'clock, and custom requires that they shall be paid by two o'clock. The law, however, gives them until three o'clock. The time up to which renewals may be made on call loans is one o'clock. The renewal rate on call loans is made in accordance with the supply and demand on the floor of the New York Stock Exchange any time before one o'clock. After the stock exchange rate has been communicated to the various offices renewals of the entire list are made on that basis between lender and the borrower direct. The rate of money after one o'clock frequently differs from the renewal rate.

Receipts for the return of the collateral are taken on the cards. All letters, memoranda, etc., are filed in the envelopes. It is also a good plan when stamping the note "Paid" to have it read "Collateral Returned." If there is anything in a loan that requires attention on a certain date, record it under the proper day in a diary or better by card system.

LOANING FOR THE BANK'S CORRESPONDENTS

When the country banker decides that his New York account is not earning enough, and makes up his mind to loan in the market on his own account, he will so notify his correspondent. When rates are high this is in vogue and the country banks benefit; when rates on call loans are low, the funds will be placed back on interest, usually at two per cent., and the city bank loses. These loans are usually made to stock exchange firms, and are payable on demand. There is what is called the participation loan, by which several small banks, not being willing, or being prohibited from loaning an amount sufficiently large to go into the market

(Wall Street loans being in the sum of \$50,000 or over, as a rule), several banks may combine, and through the city bank, or the bank acting for several, make a participation loan, each bank sharing in its proportion.

All that has been said regarding demand loans is applicable here, the principles being the same. In the National Park Bank the following method is pursued: Upon receipt of a request from a correspondent to make a demand loan, the amount is charged directly against the account of that correspondent through the cashier's check book, when the check is drawn and delivered to the broker to whom the loan is made. Upon payment of the loan, the broker's check is credited to the account of the correspondent through the general book in the note teller's department. The color of the cashier's check delivered to the brokers, and of the card showing the record of the collateral for loans made for correspondents is yellow; so that at a glance the auditor and his assistants can classify the loans made for customers, since the checks and cards used in loans made for the bank are white. This method of keeping the records of loans for correspondents makes it possible for the auditor to eliminate these figures from the general proof of the bank's work. The auditor receives from the loan department each day and enters in a memorandum book the total amount of loans made for correspondents, as well as the total amount of loans paid on account of correspondents; the difference represents the amount of loans outstanding. This method combines simplicity with safety.⁵

WAREHOUSE LOANS

A warehouse or commodity loan is one based upon commodities held by a warehouseman and evidenced by warehouse certificates. It is essentially the purchase of the goods for the account of the borrower and the loan is as good as the goods and no better. The essentials are the same as in all collateral loans and all that has been said under collateral loans here applies. There is, however, the danger of deterioration in merchandise that does not obtain in the case of

⁵Wm. C. Macavoy of the National Park Bank, New York, before New York Chapter.

Guaranty Trust Company of New York 140 BROADWAY NEW YORK, _____
For purpose of audit and verification we beg to advise you that we are loaning you at the close of business to-day, the sum of \$ _____ with securities mentioned below as collateral. If the amount and collateral is correct, kindly sign acknowledgment at the foot of this statement and return at once in enclosed envelope. Yours very truly, RALPH DAWSON, Auditor.
The above statement is correct. _____

VERIFICATION OF COLLATERAL LOAN—SENT TO BORROWER FOR SIGNATURE

security loans, the physical qualities being no element in the latter and the vital factor in the former.

In the first place, we must have a bona fide warehouse receipt, properly executed, as evidence that the property is in the custody of the warehouseman; second, the goods must be what they purport to be, and, thirdly, they must be in good condition. As evidence of the former, the bank making the loan must know the signatures and forms of the warehouse as it would know the signatures on a check. To verify the condition of the goods only physical inspection can assure quality and quantity. A receipt acknowledging

so many barrels "said to contain" a certain article, might contain something else.

Banks should loan, if at all, only on staple products, in steady demand, not subject to fashion, and with a fair margin for shrinkage.

It is conceded that the risk in warehouse loans is considerable on account of the physical difficulties; but inasmuch as it is the business of the bank to assist commerce and industry, it is needful and proper that it assume legitimate risks for the good of the common weal; and the bank that will not assume the risks of trade is not fulfilling its rightful place in the economic scheme. If every bank were to require security in the form of lawful money (and banks have made loans on actual money, the owner requiring the identical bills in a few days, and chose to obtain a loan rather than take the chance and trouble of getting others) they would be asking impossible security; while the woman who wanted a loan on her fire insurance policy was offering security of the other extreme. Somewhere in between the two lies the middle ground of safety and service.

Granting that the borrower meets the conditions named in the chapter on "Essentials in Granting Credit," and the receipt is bona fide, our chief concern will be with the class of goods.

As above stated, they must be staple. To loan on ornaments for my lady's dress would not be very good banking; but to loan on silk to make it for her would. The latter security would be stable, both in price and in demand. Of this class are loans on wheat, cotton and other cereals.

But the wheat should be of the quality claimed, and this can be ascertained by requiring the inspection certificate issued at the ports on the Great Lakes, or in New York, and which are recognized everywhere as authentic certification of the grade. And wheat so graded will hold its grade the world over. Wheat flour is good security, but apt to spoil under unfavorable conditions. Corn will "heat" if improperly kept. Only a recent inspection certificate will safeguard these tendencies. Cotton is ordinarily prime security. Its value may be ascertained at any time; but the cotton must be cotton and not the fag ends of the picking—linters.

The prices of staple commodities may be ascertained

from public quotations in the trade papers, which are generally reliable, but at times should be checked up independently, to be certain that prices are not "washed" for an occasion. The goods, of course, must be insured, and certificates of this fact required. Having an authentic document, goods of the weight and quality claimed, at an ascertained price and insured, and a margin for shrinkage, both in price and quantity, and a responsible borrower, the loan is as safe as the needs of men are constant.

BILLS OF LADING

The bill of lading is an instrument acknowledging the receipt of certain goods to be transported under stipulated conditions. When issued in certain form it contracts to deliver the goods to the consignee only, or on his order, and the delivery of the bill of lading is necessary to obtain the goods, and possession of the bill is warrant to the carrier to deliver. In other forms the bill is not required as a requisite to delivery.

It is, of course, as history has demonstrated, an easy matter for a railroad agent to issue a bill which represents nothing but a fraud. Such blanks are easily obtained, and easily issued, and gross frauds and severe losses have been visited upon American banks through bogus bills of lading. The tendency of the times is to require the transportation companies to use due care in the selection and authorization of agents and to hold them responsible for fraudulent bills. The cotton frauds of a few years ago in the Knight, Yancy matter in the South arose through bogus bills of lading. Fraudulent bills were issued, and on the strength thereof, drafts were drawn, sold and sent to Europe for payment, only to find that the cotton supposed to follow did not exist, and the bill of lading a forgery. The case is still in the courts, but thus far it has been held that the one accepting and paying the drafts must lose, as the drafts were accepted on the credit of the drawer and not on the cotton fictitiously shipped.

The dangers arising from bills of lading shipments are indicated by a set of instructions sent out by the American Bankers Association about three years ago. Summarized they are as follows: (a) Except in a few States, a bill of

lading does not guarantee delivery of the article listed in the bill. The road is responsible only for the goods actually received, even though the agent signed for more. (b) The bill of lading does not guarantee the quality of the goods. It gives a list merely of the goods as furnished by the shipper. So many boxes "said to contain"—of a certain weight. (c) It may be issued in fraud and, therefore, not binding upon the company. (d) Bills may be issued in sets, and duplicates outstanding not marked and delivery already made on the original. (e) Part of the goods may have been delivered, and not endorsed on the bill. (f) The goods may have deteriorated.

There is now issued by all leading railroads the uniform bill of lading, which has standardized the form, so that it is easily recognized. The "order" bill of lading makes indorsement necessary in order to secure the goods. Thus, a bill might consign goods to order of "William Williams" and he must indorse the bill to obtain delivery, and the company will not deliver the goods without the bill. The other form is the "direct" bill, which contemplates delivery without the bill and goods consigned on such a bill to "William Williams" will be delivered without the bill to anyone who represents him.

Bills issued on grain shipments on the Great Lakes are in sets, and possession of any one of the set is sufficient to warrant delivery, and in such cases the entire set must be delivered as a requisite to a loan.

Mr. Thomas B. Nichols, assistant cashier of the Produce Exchange Bank of New York, which deals largely in such loans, and from whom many of the foregoing suggestions have been obtained, suggests as a safeguard against forged bills that the arrival notice be required. This is sent to the consignee when the goods arrive, and by checking the name, goods, date and car number, the authenticity may be established. The cotton frauds mentioned above have resulted in a validation bureau, the cotton bills being certified to as genuine by the railroad issuing the same, and copy forwarded to the validation bureau in New York which compares the bills and attaches its certificate that the bill is genuine. Stale bills—bills that are old—should be investigated very carefully. Goods may have been sidetracked, spoiled, damaged or destroyed, and an old bill is a red flag of danger.

Elevator receipts are in the nature of warehouse receipts, these being for grain held in storage and in process of transfer to another carrier. A loan on goods in transit is practically the same as on goods in storage. Large amounts are constantly outstanding secured by grain en route from the West to New York. The bills of lading and draft traveling faster than the goods, are, nevertheless, pledged, and advances made, the security attaching wherever the goods may be.

A very excellent paper on "The Discount Department" has been written by Herbert E. Stone of the Second National Bank, Boston, from which much information may be gathered and to whom acknowledgement is here made for suggestive thoughts in this chapter.

CHAPTER X.

THE BANK AS AN ACCOUNTING MACHINE

The purpose of accounting, whether financial or mercantile is (1) to show a chronological record of the transactions which occur in a concern that affect the increase or decrease of values; (2) to determine the financial position at any given time—the possession of and liability for values; and (3) to determine the profit or the loss for the period.

The accounting records if properly kept will show (a) what the concern owns on the one hand, and (b) what it owes on the other. They will show from whom value was received and to whom value is due. And that accounting system is wrong in principle and technique that does not accurately record these facts and bring them to a focal point at stated times, omitting nothing that properly belongs in these records.

PRESENTATION OF ACCOUNTING FACTS

It is a principle of accounting that the financial condition of an individual, firm or corporation can best be understood by a simple statement conveying a single idea, which expresses much in that idea. Thus, we may state that a man is worth a million dollars. This conveys a single idea of his aggregate wealth. We may then amplify the idea, divide and sub-divide the constituent parts into as many as may be necessary to designate precisely of what the original statement is composed. We, therefore, proceed to classify his wealth into two forms, real and personal, by saying that he has half a million in real estate and half a million in stocks and bonds. We then classify the stocks and bonds and real estate into sub-divisions, so that in the process we have analyzed the elements that constitute his aggregate wealth. We may present this idea as follows:

Total wealth, \$1,000,000	{ Real estate, \$500,000	{	Factory properties,	\$100,000 (Details)
			Tenements,	200,000 (Details)
			Apartments,	200,000 (Details)
	{ Stocks and bonds, \$500,000	{	Railroad stocks,	\$100,000 (Details)
			Industrial stocks,	100,000 (Details)
			Bonds	Municipal, \$100,000 (Details)
				Rails, 100,000 (Details)
				Public Utility, 100,000 (Details)

Upon this idea all bookkeeping rests. There must be the recording of details, the aggregation of these details, first in one record which assembles and classifies the original transactions, from which they are carried to controlling accounts, and these into a statement or balance sheet which summarizes the whole process for ready reference. We have, therefore, a record of the transactions and the result of the transactions. And the bookkeeping system that does not do this is weak at its basic point.

THE ACCOUNTS OF THE BANK

The accounts of a bank differ somewhat from the accounts in a mercantile house in that the records of a bank all have to do in the main with cash. There is no merchandise to handle or account for; no "accounts receivable," for nothing is sold; no returned sales or inventories. Bank bookkeeping is an exact science.

And yet between mercantile and financial accounting there is some agreement. We have many accounts payable—not for merchandise bought, but for money deposited. We have no cash discounts; but we do have exchange, which corresponds. And if we take no inventory of stock, we do verify the bonds and commercial paper. We render statements of reciprocal accounts and have the "account stated" of the mercantile world. We buy cash for credit and pay credit in cash. The bank has a single unit—the dollar; the merchant the yard or the pound as measured into the dollar.

Bank accounts may be divided into three classes: (a) The accounts with persons and corporations; (b) the accounts with property, real or personal, but mostly personal; (c) the nominal accounts. To these might be added the general or controlling accounts, from which is made up the statement of condition or balance sheet.

The accounts with individuals—depositors, and with banks, which are in a sense depositors—measure the indebtedness of the bank for money deposited. The accounts with property record the investments, collections, transit items, etc. (property of the bank in process of collection, or property of the depositor to become property of the bank), and other property of the bank; while the nominal accounts record such items as expenses, interest, profit and loss, etc.,

ACCOUNTS OPENED

DATE _____

NAME	ADDRESS	AMOUNT		BUSINESS

ACCOUNTS CLOSED

DATE _____

NAME	ADDRESS	Date Opened	BALANCE	AVERAGE BALANCE		BUSINESS

RECORD OF ACCOUNTS OPENED AND CLOSED FOR GUIDANCE OF OFFICERS

and assemble or hold in abeyance the amounts for a time which are periodically closed out into the controlling accounts. Of course, all accounts are representative of cash in some form, for the bank handles nothing else, and the records all have to do with the increase or decrease of cash values near or remote, and the elements which affect these values.

BANKS AGREE IN ESSENTIALS

Essentially the same work must be done in every bank, whether it be large or small. The difference lies, not in the way it is done particularly, but who does it. In a large city bank the receiving teller may simply prove the cash as it

comes in over the counter, leaving the verification of the checks, their endorsements and the proof of the ticket to his assistant or clerks in the "block system proof" (which see), while the teller in a small bank will do it all himself.

Likewise the collection clerk. He may have charge of nothing but the collections of the bank, while this may be but part of the many duties of the general bookkeeper of the country bank. As banks grow in size, the work must be divided and sub-divided into as many parts as needed in order to make a finely organized piece of machinery, but the seemingly complex machine with hundreds of men does no different work than the more simple machine that runs with three. And when in this work we speak of turning an item over to a department, we mean that it goes through a certain process as well as through a distinct department of the bank's work.

It is impossible to describe the bookkeeping of the average bank, for the "average bank" does not exist; we must either take a large city bank; a bank in a moderately large city or a country bank; but wherever the bank exists, or whatever the size, certain fundamentals of the bookkeeping must be observed in order to keep the records in proper shape. These records expand with the changing needs of the business; but in their essentials they all agree. If we understand a large bank we shall easily understand a small one, since those departments of a large bank which are necessary to the conduct of the small one are condensed or combined with other work.

Thus the credit work may be finely organized into a distinct department, and have elaborate information regarding borrowers at hand, and officers who specialize in different lines of business; but in a country bank the cashier must have, somewhere in his head, the same information if he would extend credit wisely. If a hardware dealer applies to a certain Chicago bank for a loan, he will be referred to the vice-president who knows the hardware line and follows it closely; but if he makes application to the little bank the cashier must know practically the same things about the hardware business if he would act with discretion. It is the difference between the general practitioner and the specialist.

FUNDAMENTALS ALIKE IN ALL BANKS

The fundamentals of practical banking are alike in all banks, the difference being in the methods and machinery by which the fundamentals are put into execution. Thus, there is the department of receiving and paying money, making loans, keeping books, rendering statements, and directing the policies of the institution. The work may be highly departmentized, or done by a force of three or four men; but the same work must be done in its essence. While no two banks are alike in their details, the work as a whole follows lines more or less standardized.

If the student understands the nature and intent of the work in mind, the tools with which to accomplish the results will readily be found, and too much minutia leads to confusion. Moreover, to describe books of record is not as interesting as to see them, for that is the purpose of illustrations; and to understand them one must see and not simply read about them. In other works will be found many of the present-day systems which are old and tried in their fundamentals, as well as in their machinery, and to attempt here to describe the different books of record in minute detail would be to repeat what other authors have said, which is far from the present purpose. Therefore, we will confine ourselves to broader views, and refer to other works as occasion warrants.

CORPORATE RECORDS

The records of a bank may be divided into: (a) The corporate records and (b) the financial records. The corporate records consist of (1) the minute book; (2) the stock ledger; (3) the stock certificate book; and (4) the stock transfer book. All other records are financial and not corporate.

The minute book should contain a complete chronological record of the corporate affairs of the bank. The election of officers, their terms and compensation, amendments to by-laws, issue of capital, declaration of dividends, ratification of loans, and all matters which come before the board of directors, are recorded in the minute book.

The record is best kept in typewriting, and the bound book is recommended as the safer way, inasmuch as the cor-

porate history and the formal proceedings of the directors are of utmost importance and should not be open to the frauds and abstractions possible in the loose leaf. The book typewriter is, therefore, a helpful adjunct to this end.

The record should begin with the place and date, the fact that the meeting has been duly called and who presides. Then follows the names of those present, in order to show a quorum, and to fix responsibility for the acts there done. The minutes of the last meeting are read and approved, and routine business transacted, following the prescribed order laid down in the by-laws. This usually takes the form of reports and resolutions. The former are incorporated in the record in full or referred to as "on file," while the latter are transcribed in full, giving the name of the one who offers, the one who seconds, and the adoption or rejection of the resolution. Some matters require roll call and others a mere "aye and nay" vote. The minutes are duly attested by the secretary or cashier, and become the official history of the bank.

They should be carefully indexed as to names and subjects, every proper name being indexed and every subject and resolution indexed and cross-indexed if necessary to make ready reference possible.

Stockholders' meetings are recorded in the same manner, the number of shares held by each stockholder present in person or by proxy being also stated.

The minute book should contain a history of the bank as it is made in the board meetings. It should fully set forth the proceedings, and completely describe the action taken. Some banks record the vote on every question submitted, even to calling the roll on every loan; but this would seem needless except in those cases where the law requires roll call, or in matters where dispute has arisen, when the vote should be fully recorded. In routine matters, details of the vote are not essential.

Record should also be kept of every director, when elected, when resigned, when deceased, etc., for biographical and historical purposes. In elections, the law must be closely followed, both before and during the meeting, so that the election may be regular.

One of the functions of the board is to pass on loans, and where the volume is large, to cumber the records with offer-

ings would confuse the other records, and so an offering book may be used to list the offerings, and the action of the board on the various items indicated by proper entry, and certified to by the attestation of the cashier or other officer, and signed by the discount committee. The idea in mind is to fasten the responsibility for the loan beyond peradventure.

Reports of examinations by directors, public accountants and State and Government authorities should also be entered in the minutes.

STOCK CERTIFICATE BOOK

The stock certificate book contains the certificates of stock which are evidence of the ownership of shares. This is similar to a check book in that it has a stub giving the name of the stockholder, date, number of certificate, number of shares and sometimes from whom the certificate was received for transfer after its original issue. Provision is also made for a receipt on the bottom of the stub for the acknowledgment of the receipt of the certificate.

The stock book records the ownership of the stock in detail, giving the name of each owner. The New York law requires that a stock book be kept, setting forth in alphabetical arrangement the names of stockholders, the address of each, number of shares owned, when acquired, and amounts paid thereon.

Thus, if John Jones bought ten shares of the bank's stock on March 1, 1915, represented by certificate No. 210, and sold five shares to William Smith on April 1st, represented by certificate No. 220, Jones receiving new certificate for five shares, the account would look like this:

JOHN JONES

Date	Ctf. issued	Ctf. cancelled	Dr.	Cr.	Bal.	Amt. paid full	To whom issued
Mch. 1, 1915	210			10	10	full	
Apr. 1, 1915		210	10				Wm. Smith (5)
Apr. 1, 1915	221			5	5	full	

Account would then be opened with William Smith as was done for Jones. The total of this book as representing shares outstanding must equal "Capital Stock" account in the general ledger, which stands at the amount of authorized capital and is a credit balance.

In banks where the stock is active a stock transfer journal is sometimes used, which is a chronological record of changes in stock ownership, giving on one side the date, number of the transfer, number of certificate, and from whom received and to whom the new certificate is issued. On the right-hand page is the same information as to the new certificate or certificates; for one certificate may be split up into several, and several might be combined into one. The journal merely records the transactions day by day as a guide for posting in the stock ledger.

STOCK SUBSCRIPTIONS

Subscriptions to capital stock are generally paid for in installments (in a new bank) and receipts issued for the same. When the final payment is made the stock certificate is issued. The details are noted on the stub for record purposes and all certificates are numbered. Each must be accounted for, either as outstanding, or as having been issued and cancelled, or destroyed because of errors. Cancelled certificates are usually attached to the stubs.

It is as important that there shall be a record of transfers as there shall be record of issues. When transfers are made, the old certificate should always be cancelled and new ones issued for the new allotments, so that each certificate will represent a certain number of bona fide shares outstanding, with a clear-cut record of their issue. Old certificates are cancelled by stamping, or otherwise indicating their cancellation, or by slightly mutilating the signatures. A rubber stamp "cancelled" is quite sufficient.

TRANSFER OF STOCK

Authority to transfer stock may be made on the back of the certificate in places provided for such transfers, or by a separate instrument. Some banks have a transfer book for this purpose, but this prevents the transfer being recorded unless the parties are present, which does not always follow. Care should, of course, be taken to ascertain that the transfers are regular and forgery does not enter. Transfers made by agents, executors, trustees, etc., must have proper authority accompanying.

A record of stockholders should be kept, by name, address, number of shares held, when issued and address. As changes are made, the list is changed, so that a correct list of stockholders is always at hand, the total number of shares outstanding being the amount of the capital of the bank.

DIVIDENDS

Before declaring dividends, the earnings of the bank for the period must be ascertained, the expenses paid and accrued deducted, losses charged off, and from the net profits the dividend may be declared, after passing to surplus fund the amount required by law. The law usually stipulates what the minimum surplus shall be and what portion of the profits shall be carried to surplus until it reaches that figure. After this has been done, the dividend may be declared as the profits warrant.

After being authorized by the board, the amounts are set opposite the various names entitled thereto, as of a certain date (no transfers being made for a certain length of time in order to allow for the closing of the books and the paying of the dividend to the proper persons) and checks mailed to the various stockholders. The total amount of shares listed must correspond with the total stock authorized, and the total of the checks equal the dividend. The dividend checks are usually distinctive checks, indicating that they are dividend checks, and after the dividend has been credited to "Dividend" in the general ledger, the checks are charged against it as they come in, the unpaid checks representing the "unpaid dividends" on the liability side of the statement.

Reports of dividends are usually required by the supervising authorities, the intent being to check the extravagance of the bank in respect to its distribution of profits.

THE BOOKS OF RECORD

The books of record of a bank may vary to a certain degree, according to the size of the bank, but there are certain records that must be kept by all banks, whatever their methods or however small the bank may be. It is impossible to conduct a bank without them. As the business grows

and is divided and sub-divided, other books will be used, but they are merely offshoots of the original forms. The necessary books are: The minute book to record the proceedings of the board meetings (there may also be various minute books for committees); the stock certificate book; stock register and transfer book; stock ledger; the general cash book or journal; the general ledger; daily statement book; certificate of deposit register; cashier's check register; register of drafts issued; individual or dealers' ledgers; check and deposit scratchers; discount and loan registers; maturity ticklers; liability book; offering book; note tickler; collection register; teller's settlement books (teller's cash); dividend book and payroll, etc.

The uses of these books will be apparent as the work progresses, and description of either their form or purpose would be needless repetition here.

The main books of record are: (a) The journal, which is a chronological record of the transactions which take place. When these transactions are assembled, sorted out as it were, each class by itself, we have (b) the ledger, which is an assembly of journal entries. The ledger may be a general ledger, an individual ledger, an investment ledger, a mortgage ledger; but it is merely the assembly of journal entries in some form; which journal entries are transcripts of or the original entries, most likely transcripts of some other form of original entry, such as the deposit tickets, collection or discount tickets made at the time of the original transaction. And all the accounts come together in large banks and small in the (c) statement book.

THE GENERAL JOURNAL

The general journal is the aggregation of all the work of the bank for the day in bulk, as the other journal records are the aggregation of the individual transactions. It balances the work of the whole bank, as the other books balance the work of a single department. From the various departments, or from the various books of the bank, these items are assembled on the journal for proving purposes and also for the purpose of carrying to the general ledger. Thus, the receipts from depositors will be entered, either from the teller's window list, or from the receiving teller's depart-

ment; payments from the paying teller. Discounts are taken from the discount clerk or discount register. Drafts issued, expenses paid, interest received, etc., are properly recorded, so that in the final test everything that has gone through the bank for the day will be entered. Of course,

General Balance Journal.

	DEBITS	CREDITS	BALANCE	BALANCE
Cash Items				
Cash				
Mechanics and Merchants Nat. Bank, N. Y.				
National Bank of Commerce, New York				
American National Bank, Nashville				
National Bank of the Republic, Chicago				
First National Bank, Nashville, Tenn.				
Mechanics and Merchants Nat. Bank, St. Louis				
Union and Farmers Bank, Memphis, Tenn.				
Bank of Commerce and Trust Co., Memphis				
Second National Bank, Cincinnati, Ohio				
Philadelphia National Bank, Philadelphia				
Total Cash				
Loans and Discounts				
Stocks and Bonds				
City of Jackson Warrants				
Madison County Warrants				
Judgments				
Overdrafts				
Office Furniture and Fixtures				
Expense Account				
Building Account Union Bank and Trust Co.				
Insurance Department				
Trust Department				
Risk Reports				
Settling Department				
Cashier's Checks				
Certificate of Deposit Account				
Individual Deposit Accounts				
Dividends				
Total Deposits				
Capital				
Reserve Account				
Loan Box Account				
Expense Paid				
Exchange Account				
Interest and Dividends				
Trust Funds				
Real Estate				
Cash Differences				
Contingent Fund				
Profit and Loss				
Total				

GENERAL BALANCE JOURNAL

each item could be so entered, and some savings banks do enter every deposit and every draft, every check drawn and each item of interest; but it answers the same purpose to do so in bulk, making the original entry at the window or at the place of receipt. When the work of the day is over, each department reports to the journal clerk its receipts for the day and its payments, or the difference, and the work of the whole must balance as has the work of each branch. As soon as the journal balances the work for many of the em-

ployees is over. The difference between the two sides of the journal is the cash balance on hand.

From the journal the entries are posted to the general ledger. Where the work is voluminous a journal may be kept for each class of business, as, for instance, the "foreign journal" is the journal for out-of-town accounts. These in some banks are numerous and inasmuch as each correspondent has a debit and credit each day, these records necessitate much space and can best be kept separately, and the controlling figures passed through the general journal. There may be a debit and a credit journal, and still further divided into groups by alphabetical or geographical arrangement.

THE EQUATION OF ACCOUNTING

All accounting records are based upon the principle that there shall be an equilibrium; that the business is always in a state of balance. For every asset there must be a corresponding liability. If an asset is increased some liability must be increased. If an asset is reduced, some liability is reduced. If one asset or liability is increased another may be reduced. If cash goes out, a liability is reduced; if it comes in, assets are increased and liabilities likewise. There may be a shifting about, but unless the affairs are in balance error has been made somewhere that must be corrected by another entry to effect the balance. And until the bank man learns the fundamentals involved in the brief statement of accounting principles above given, he cannot keep a set of books.

The equation of all accounting is: *Assets minus liabilities equals capital.*

You may state this in several ways and it always remains true. Assets minus capital equals liabilities. Liabilities plus capital equals assets. And the bank man must know this, or he will never keep his books in balance. And besides he must know what is an asset or asset value, and why, and what is a liability and why. When he pays the salaries, he carries the item for a time on the asset side because he has set up a nominal asset to take the place of the real asset (cash) which has gone out. And when he receives interest he makes it appear as a liability, because he has increased his assets and must have a liability to offset. And thus there

is a constant offsetting of debits and credits, so that the statement is always in balance; and to keep it so is the art of bank accounting.

THE STATEMENT OF CONDITION

The financial condition of all concerns is expressed in the statement of condition. In mercantile or trading concerns this is made periodically; but in banks it is made, as a rule, daily, reported to the authorities as called for and published as the law requires. This does not, however, always express the true condition, for the element of accrued earnings is not generally given in banks of discount, but is, as a rule, in savings and investment institutions. Neither is accrued interest payable stated, but for general purposes the statement gives all the information usually desired, leaving it for periodical audits and examinations to determine the technically correct condition.

The records of all banks agree in their essentials. There may be a few books of record under a single man, or there may be many under many men, but when these records come together in the statement, there is a unity of arrangement and classification.

PURPOSE OF THE STATEMENT

The statement of condition has two purposes in mind: (a) To show the bank to be in a state of equilibrium, and that all assets and liabilities have been accounted for (except it may be a counterbalancing error, not likely to happen often; and (b) to guide the executive officers in their administration of the bank, and to inform the public and supervising officials of the condition.

The form which accounts for all the various items, and which is in general use by all classes of banks is in the following arrangement:

ASSETS.

1. Loans and Discounts.
2. Overdrafts.
3. U. S. Bonds to Secure Circulation.
4. U. S. Bonds to secure Deposits (par value).
5. Other Bonds to secure U. S. Deposits.
6. U. S. Bonds on hand (par value).

7. Premium on bonds for Circulation; Premium on other U. S. Bonds.
8. Bonds, Securities, etc., including Premium on same.
9. Banking House; Furniture and Fixtures.
10. Other Real Estate Owned.
11. Due from National Banks (not approved Reserve Agents).
12. Due from State and Private Banks and Bankers, Trust Companies, and Savings Banks.
13. Due from approved Reserve Agents.
14. Due from Federal Reserve Bank.
15. Checks and other Cash Items.
16. Exchanges for Clearing House.
17. Notes of other National Banks.
18. Fractional Paper Currency, Nickels, and Cents.
19. Lawful Money Reserve in Bank. (a) Specie; viz.: Gold Coin, Gold Certificates, Gold Certificates payable to order, Clearing House Certificates, Silver Dollars, Silver Certificates, Fractional Silver Coin. (b) Legal Tender Notes.
20. Redemption Fund with U. S. Treasurer (not more than 5% on Circulation).
21. Due from U. S. Treasurer.

LIABILITIES.

1. Capital Stock paid in.
2. Surplus Fund.
3. Undivided Profits (including sums, if any, set aside for special purposes, except reserve for taxes).
4. Circulating notes secured by U. S. Bonds (less amount on hand and in Treasury for redemption or in transit.)
5. State Bank Circulation outstanding.
6. Due to National Banks (not approved Reserve Agents).
7. Due to State and Private Banks and Bankers.
8. Due to Trust Companies and Savings Banks.
9. Due to approved Reserve Agents.
10. Dividends unpaid.
11. Individual Deposits subject to check.
12. Savings Deposits.
13. Demand Certificates of Deposit.
14. Time Certificates of Deposit.
15. Certified Checks.
16. Cashiers' Checks outstanding.
17. United States Deposits.
18. Deposits of U. S. Disbursing Officers.
19. Bonds Borrowed.
20. Notes and Bills rediscounted.
21. Bills payable, including Certificates of Deposit for money borrowed.
22. Reserved for Taxes.
23. Liabilities other than those stated.

To understand the various items that go to make up a bank statement is to understand bank accounting, and each item, therefore, will be traced to its source to see what it represents.

ASSETS

1. *Loans and Discounts.*—This represents the amount the bank has loaned either on straight loans or by way of discounting paper of its customers. As loans are made and paid off, record is made in the discount depart-

ment or on the loan journal, the total being carried to the general journal, thence to the general ledger, and from there to the statement book.

National banks are required to report their loans by classes, as (a) "Demand Loans," one or two names; (b) "Demand Loans," secured by collateral; (c) "Time Loans," two or more names; (d) "Time Loans," single name; (e) "Time Loans," secured by collateral. The ledger account should correspond with this classification.

2. *Overdrafts*.—This item is made up of amounts by which depositors have overdrawn their accounts, and is in

OVERDRAFTS

DATE _____

NAME	ADDRESS	AMOUNT	AVERAGE BALANCE	REMARKS

BOOKKEEPER'S REPORT OF OVERDRAFTS

the nature of loans without interest or security; and since the bank has paid value for them, they must appear as an asset, to measure the indebtedness of the depositors to the bank as contra distinguished from the debt due the depositors were the balance due to and not due from the depositors. To effect the balance, the individual deposits are increased by the same amount, the difference being the net deposits. This item is not carried on the general ledger, as a rule, the figures being obtained from the ledger bookkeepers who make notations of overdrafts, and report to the general ledger bookkeeper, who also keeps a record of these amounts. If the net deposits only were shown as a liability, the amount due to the bank from depositors who have overdrawn would not appear as a resource, which it properly represents.¹

¹By a recent ruling by the Comptroller of the Currency overdrafts in national banks are now forbidden.

3. *U. S. Bonds to Secure Circulation.*
4. *U. S. Bonds to Secure Deposits.*
5. *Other Bonds to Secure U. S. Deposits.*
6. *U. S. Bonds on Hand.*

National banks upon their organization are required to invest a certain portion of their capital in United States bonds,* against which they may issue their notes. That is, upon purchasing bonds and depositing them with the Treasury Department, circulating notes are issued to the bank in the par amount. The bank, therefore, draws interest on the bonds and when the notes are paid out in the form of loans, the bank receives interest on the loan also, thus making additional profit. Thus, if the bank draws interest on the loan at six per cent., and two per cent. on the bonds, it is getting eight per cent. on the money; but the cost attending the issue of bank notes reduces the profit on the bonds to about one and a half per cent., and many banks do not take out more circulation than the law requires, while others take out large amounts.

Before a bank may obtain a deposit of Government funds, it must lodge with the Treasury Department security in the form of bonds, either United States or other bonds, and items four and five represent these bonds which belong to the bank, but are held in Washington for its account. United States bonds on hand merely means bonds which the bank owns and has in its vaults and unpledged either for deposits or for currency purposes.

7. *Premium on Bonds for Circulation; Premium on Other U. S. Bonds.*—This represents the premium paid on bonds, the securities being carried at par. The premium is really part of the cost of the bonds, and a part of the market value. But it is the rule in many banks to carry securities (especially "Governments") at par and the premium separately. This is charged off from time to time as conditions warrant.

8. *Bonds, Securities, etc., Including Premium on the Same.*—This represents other bonds and stocks held by the bank, and includes the premium, which makes the amount of par and premium their cost, which should be scaled by the process of amortization so that the bonds stand on the books

*Repealed by the Federal Reserve Act.

at their present investment value as determined by amortization, the deductions on premium bonds and additions to discount bonds being made from time to time so that the present investment value is shown. Especially is this true of bonds for permanent investment.³

9. *Banking House, Furniture and Fixtures.*—This represents the real estate occupied by the bank as its banking house, the cost of the furniture and fixtures, vaults, etc., which should be properly scaled down from profits, until the furniture is entirely eliminated, or if held at all, only at second-hand prices, and the real estate at its fair market value.

10. *Other Real Estate Owned.*—Banks are not, as a rule, permitted to hold real estate, except for banking purposes, unless the same be taken for debts due the bank. They cannot acquire it as an investment, and consent of authorities is necessary to hold for a period of time. Real estate is not a good banking asset, and the reason why so many private banks and bankers have come to grief is the fact that they have invested in real estate, first and second mortgages, and tied up deposits payable on demand in a long-time and unliquid security. Real estate is a precarious investment and is well tabooed in banking circles.

11. *Due from National Banks not Reserve Agents.*—This represents, in national banking circles, the amount due from banks that are not reserve agents, on deposit account, items charged to other banks and in process of collection, and overdrafts of banks (not included in overdrafts of customers); balances due from other banks against which drafts are sold.

12. *Due from State Banks, Bankers, etc.*—These are balances of the same nature as the above, due from State banks, bankers and trust companies, against which the depositing bank draws its drafts, and to which it sends its collection items.

13. *Due from Approved Reserve Agents.*—Before a bank can act as a reserve agent for another as the law requires, or at least allows, consent must be obtained from the governing authority, unless the law makes the provision gen-

³For full discussion of this principle see chapter on "Bond Accounting in Theory and Practice" in the Savings Bank and its Practical Work, by the author.

eral. In national banks the consent of the Comptroller of the Currency is necessary, and in order to determine the amount of these balances with approved agents, and, therefore, allowable in the reserve account, they are reported separately. They are not numerous, for reserve cities are few.

14. *Due from Federal Reserve Bank* represents the reserve carried with the Federal Reserve Bank of the district, and is of the same nature as No. 13.

15. *Checks and Other Cash Items*.—This includes all checks and other items which must be collected by messenger, or which for some reason or other cannot be sent out for payment or charged to some account, but must be held in the cash. They should never be items for money advanced, "I. O. U.'s" or anything of the sort. The cash should be "clean."

16. *Exchanges for the Clearing-House*.—This is the amount of the checks and other items that will be sent to the clearing-house the next morning, and for which payment will be made the next day.

17. *Notes of Other National Banks*.—These are national bank notes separated from the notes of the issuing bank and reported independently. In national banks they cannot count as reserve, but may in State institutions.

18. *Fractional Paper Currency, Nickels and Cents*.—The fractional paper currency is a relic of the Civil War, and a few of these old notes for less than one dollar are still in circulation, or held by banks as souvenirs. They are an obligation of the Government and are still good. One bank has carried seventy-five cents' worth of these on its daily statement for nearly thirty years.

19. *Lawful Money Reserve*.—This is the lawful reserve of the bank, and includes: Gold and silver coin, gold certificates, gold certificates payable to order, clearing-house certificates, silver dollars, silver certificates, fractional silver coin, legal tender notes (greenbacks), and Federal Reserve Notes.

20. *Redemption Fund with the U. S. Treasurer. (Not More than Five Per Cent. of the Circulation)*.—National banks are required to keep on deposit with the Treasurer at Washington a fund of five per cent. of the circulation to redeem the notes as presented through the Treasury Department. The Treasurer credits notes received against this

fund, and charges notes issued, and this fund is part of its reserve. Upon advice from Washington that a certain amount of notes have been redeemed, or retired, the bank's circulation account is charged and the redemption fund is credited. The fund must be kept at five per cent.⁴

21. *Due from the U. S. Treasurer.*—This is a transit account for currency which may be mutilated or good, sent to Washington for redemption. When currency is sent out it is charged to this account and when returned the account is credited with the amount.

In the accounts with banks, as listed above, the following remarks are opportune:

Remittances of cash items are charged as of the date when sent out and appear in the balance although en route. Collection items are charged only on receipt of advice. When currency is shipped it is charged to the bank upon memo. from the paying teller. Drafts on banks are credited in total from the draft records.

Where no account is kept with a bank and the item is sent out as cash, it is charged to a "transit account" or some similar name, to indicate items out in the process of collection, and not sent to regular correspondents.

LIABILITIES

The liabilities of a bank are of three classes: (a) Liability to the owners or stockholders; (b) liability to the depositors and to other banks; (c) liability on its notes.

1. *Capital Stock.*—This measures the proprietary interest of the owners. The amount is regulated by law and the bank in its organization must have the required capital paid in in cash. The record of these payments is made in the capital stock account, and the evidence of the interest of the stockholders is the stock book, which has a record of all stock issued and cancelled. Stock is issued in shares, and there should always be the authorized number of shares outstanding.

The stockholders are the owners, entitled to the profits and liable for the losses, and capital is always a liability. It is the debt which the corporation as a corporation owes the stockholders. They cannot, of course, collect this debt.

⁴The Federal Reserve Act repeals the reserve effect of this fund.

There is no process by which a stockholder can compel the corporation to give him back his investment. He can only surrender his ownership by transferring his shares to another, and the stock records show such transfers.

2. *Surplus*.—This may consist of amounts originally contributed by the stockholders in addition to their stock. It is additional protection to the depositors. When a bank is started, it frequently happens that the stock will be offered at, say, \$125 per share. The \$100 is carried to capital account and the \$25 to surplus fund. The stockholder thus contributes a bonus of \$25, hoping the bank will become so prosperous that the stock will, as an investment, be worth \$125 or more on the market.

The surplus also includes the profits of the bank which have not been paid out in dividends. As a rule banks are required to set aside from earnings a certain portion before dividends are declared, this going to the surplus fund until it reaches a certain percentage of the capital. The surplus affords additional working capital on which no dividends are paid, and is one of the highly protective features of banking and all banks strive to accumulate a surplus of considerable magnitude. It is an evidence of good management. The surplus fund is more or less stationary, additions being made from time to time out of undivided profits.

Some banks have large capital and large surplus funds; others have small capital and large surplus funds, the most notable being the Chemical National Bank of New York, which until 1907 had capital of \$300,000 and an enormous surplus, and for that reason its stock was selling at about \$4,400; but the capital has since been increased by stock dividends to \$3,000,000 so that the present capital is \$3,000,000 and surplus \$5,000,000—making a very strong institution.

It stands to reason that a bank whose capital and surplus is, say, a million dollars, and whose debts (deposits) are five millions, is stronger than the bank which has but half as much capital and surplus and the same liability; for in the former case, the bank must lose a million before its depositors would be injured, while in the other case a loss of half as much would affect the depositors. The pride of banking is to have a large capital, ample surplus, and to build up the latter out of earnings, thereby increasing the

value of the shares as well as offering added protection to depositors.

3. *Undivided Profits.*—The undivided profits represent the bank's undistributed earnings. The profits arise from the loans and investments, interest paid on balances in other banks, and exchange charges received for drawing drafts, or collected from its customers. The following are the charges against the earnings: Overhead expenses, such as rent, light, taxes, salaries, together with stationery, interest paid on deposits, exchange paid for collecting checks, losses. The balance is the undivided profits, from which additions are made to surplus. The undivided profits' account is the profit and loss account of the bank, to which are carried the earnings and against which are charged the expenses and the result is the net profits.

4. *Circulating Notes Issued, Secured by Bonds.*—As was said under the resource item corresponding to this, before notes can be issued bonds have to be purchased and lodged with the Treasurer at Washington. After the currency notes have been issued by the Comptroller of the Currency they are sent to the bank and signed by the proper officers and placed in the till for paying out. They are, like the deposits, a liability of the bank.⁵ Notes on hand, in Washington for redemption, or in transit must be deducted and only net amount outstanding shown.

5. *State Bank Circulation.*—This no longer obtains, there being a tax of ten per cent. on State bank issues and none are now in circulation.

6. *Due to National Banks not Reserve Agents.*—This is the amount due other national banks on open account, items received for collection as cash, and for which credit has been given.

7, 8, 9. *Due State, Private, Savings Banks, Trust Companies, and Approved Reserve Agents.*—These are the balances due other banks, against which drafts are drawn by them and on which interest is, as a rule, paid. Amounts due savings banks and trust companies are reported separately to the Comptroller. Overdrafts of banks are not regarded as overdrafts, but amounts due to or from banks; hence the liability must include the overdrafts of the

⁵See under bank notes, chapter 2.

bank, and the asset side show the amount included in the amounts due from banks.

9. *Due to Approved Reserve Agents.*—This has already been sufficiently explained. It is segregated in order to determine the net liability of the reserve agents' account.

10. *Dividends Unpaid.*—When a dividend is declared it is charged to the undivided profits and credited to dividend account. Checks are mailed to stockholders, and as presented are charged to the dividend account. The balance is represented in this item. Dividends are frequently unpaid for years.

11. *Individual Deposits Subject to Check.*—This is the

The German-American National Bank **25614**

Fort Wayne, Ind. June 2 1911 \$500.00

James Smith has deposited in this Bank

Fifty Dollars

payable to the order of *himself*

on return of *no. 123456789* properly endorsed.

Wm. Weir Cashier

NOT SUBJECT TO CHECK

Interest will be paid on this Certificate at the rate of three per cent. per annum if left four months, and four per cent. if left six months. No interest after six months.

CERTIFICATE OF DEPOSIT

principal item of a bank's liability. It may arise from deposits of cash or checks, or from the proceeds of loans which are credited to the checking accounts; but it is the chief liability of the bank and all but the time deposits are payable on demand.

The custom is to show only the net individual deposits on the general ledger. This is the deposits less overdrafts. The overdrafts are, as before stated, really a loan without security. The statement shows the gross liabilities, and contra on the asset side the overdrafts which effect the balance. In a pamphlet on bank accounting issued by the American Institute of Banking, it is stated in this regard:

"It is not possible for the general ledger bookkeeper having before him the daily statement of the previous day and the total debits and credits of the current date to deter-

mine the amount of the overdrafts and the individual deposits. He can, however, determine the deposits less overdrafts and this he does in the general ledger. Later, when he receives from the individual bookkeeper a memorandum of the amounts of the overdrafts, he enters that amount in the daily statement and increases his ledger balance in the deposit account by that amount for the daily statement."

12. *Savings Deposits*.—These are the deposits received in the savings department, subject to withdrawal, generally upon notice, and represented by pass-books. The totals are received from the savings tellers and carried to the general ledgers as in the case of individual deposits. There are no overdrafts.

13, 14. *Certificates of Deposit*.—These are of two classes: (a) Demand and (b) Time. These certificates are in the nature of savings deposits, left with the bank on interest and for which a receipt in the form of a "Certificate of Deposit" is issued, which promises to pay the amount upon demand or at a stated time.

15. *Certified Checks*.—These are the checks which the bank has certified and become liable for payment. They are, when certified, charged to the drawer's account and carried to the certified check account, and the balance due on these items here appears. The checks when paid are charged to the account and the amounts reported to the general ledger bookkeeper for his records.

16. *Cashier's Checks Outstanding*.—A cashier's check is an order drawn by the bank on itself. They are issued for paying the bank's expenses, and other expenditures, and are often issued for local purposes in lieu of a New York draft, and are sometimes exchanged for the customer's check in preference to making a certification. In some places this is quite common. A cashier's check account is kept in detail and the amounts issued and paid are reported to the general ledger bookkeeper for making his statement.

17, 18. *United States Deposits, etc.*—These are deposits of the United States from funds in the Treasury, or from customs duties, taxes, etc., or any other source, and for which the bank has lodged bonds as security, as mentioned on the resource side of the statement. Postal savings deposits are in this class and are usually reported separately.

CERTIFICATE OF DEPOSIT REGISTER.

DATE	DEPOSITED BY	Number	Amount	TOTAL	Date Paid	PAYABLE TO
	<i>Amounts brought forward,</i>	00				
		01				
		02				
		03				
		04				
		05				
		06				
		07				
		08				
		09				

CERTIFICATE OF DEPOSIT REGISTER

19. *Bonds Borrowed*.—It sometimes happens that a national bank will borrow bonds to secure its circulating notes rather than buy them. A fee is paid to the owner for their use and security given. These bonds are reported separately, since they are not the property of the bank. The bonds appear on the other side of the statement among the bonds deposited with the Treasurer, and the liability is here shown.

20, 21. *Rediscounts and Bills Payable*.—It frequently happens that a bank will have call for more money than it has to spare. It cannot credit a loan on deposit account, for by so doing it would reduce its reserve below the required amount. It cannot pay out the cash, for this effects the same result. It, therefore, must turn into money some of its securities, either by: (1) Calling upon borrowers whose loans are due to pay. This will bring in cash, or reduce its liabilities by reducing deposits; (2) selling securities, and it may be take a loss; (3) selling outright some of its loans, and so anticipate their payment. It has no further liability if it sells "without recourse"; (4) rediscounting some of its notes and bills. This is the European custom. If it retains any liability for their payment, it must carry the amount as a contingent liability. This it does by the item of "rediscounts." Of course if they are actually sold without liability, no further record appears. An asset has gone out and in its place has come another; i. e., loans and discounts have been reduced and cash increased, or the amount due from banks added to, or in some other form the balance has been maintained, and it has available funds for loan purposes. It may sell or rediscount outside paper for loaning in the home market. Frequently banks rediscount with their city correspondents, and under the Federal Reserve System the rediscount of notes and commercial paper will be one of the chief avenues for aid in times when banks need funds and the greatest value of the Federal Banks to the financial operations of the country will come through the privilege member banks will have of turning their good assets into cash by this means; (5) by borrowing on its own note and this forms a liability reported under bills payable.

22. *Reserved for Taxes*.—In all accounting processes it is a rule that accruing obligations shall be allowed for, preferably by setting aside an amount to cover the charge.

Taxes and other yearly charges accrue constantly. It is not fair to say that suddenly on a certain date the amount became due; for part was due each day. Just the exact amount cannot be determined until the tax is levied; but in cases such as rent, if paid yearly, the exact amount is known, and can be determined as a liability at any time; therefore, all well-managed concerns make such allowances, and banks create a book liability by setting up an account called "Reserved for Taxes" which is carried and added to from time to time, until the amount is paid, when the liability disappears. The amount can be fairly determined from past payments.

23. *Other Liabilities.*—These are for other liabilities not stated or covered in the foregoing, and might include salaries, pensions, interest on deposits unpaid, etc.

We have thus gone through a statement to determine what each item means, where it came from and what its place is in the accounting scheme.

THE BOOKKEEPING FORCE

The individual who is responsible for the bookkeeping of the bank may be termed by various names, such as head bookkeeper, auditor, chief clerk, comptroller, assistant cashier, etc., but his duties are in the main the same—to keep the bookkeeping machinery working smoothly. He must keep the statement in balance. He must handle the men.

The head of the accounting force comes into closer contact with the rank and file of the force than any other man in the bank. He is immediately responsible for what they do, and is the "general" who uses the forces supplied him to produce certain results. It is, therefore, proper at this point to discuss the force; how it is recruited; how governed, before taking up what it does in a mechanical way.

Most banks work from the bottom up, to a large extent, and train their own men. Boys are taken in as messengers at from fourteen to eighteen years of age, and as they become familiar with their surroundings are advanced as vacancies occur, if in the opinion of their superiors such advancement is warranted.

THE APPLICATION

The application for employment is usually in writing, both to test the handwriting of the applicant and to ascertain his general qualifications. Some banks prefer a letter of application to a formal document, to test the resourcefulness of the applicant and the way he goes at things. If the applicant is favorably considered he may then file a formal application as a matter of record.

After this application has been received in formal shape, it becomes necessary to check the statements made therein, and this is done by communicating with the references given. This may be done by a letter of inquiry, or by a printed form asking certain questions.

It is opportune to say here that it is sometimes unfair to the applicant to judge too much by what may have happened in another place of employment, without knowing both sides of the story. Of course, if a man were discharged for indulgence in liquor, this is an obvious fault; but if it were a matter of temper or temperament, he might under more favorable conditions make an exceedingly valuable employee. Some of the lamentable failures in banking are due to wrong environment. And not knowing what that environment was, we cannot pass judgment, or at least should not unjustly. Some banks prefer to take men out of employment; for if they do not fit, they are no worse off; but to take a good man out of a position which he already fills to satisfaction is risky, especially for him.

AVAILABLE MEN

Inasmuch as most banks have occasions when they may need men at short notice they should have a file of applications, giving the general qualifications of men and boys, so that when the need comes there will be available candidates. It is important that the bank have the experiences of those advanced in life as a guide to what they have done, as well as an indication as to what they claim to be able to do. Boys should be investigated particularly as to their home life, for this is the essential element. A boy who has a good mother is a safe risk. The boy who keeps questionable company, is out late nights, and has no restraining influences, is a doubtful risk.

Some banks make it a rule to obtain help by advertising in the newspapers, filing application with the Y. M. C. A. and other high-grade agencies, never, of course, giving the name of the bank. This is often done to prevent directors from favoring their friends. From the answers to these advertisements applicants are interviewed and selections made.

The knack of choosing men is an art acquired by few. The ability to get men who can do things better than yourself is a fine science, especially if in the doing they reflect credit upon themselves and you—and you do not become jealous. First impressions count. And while it is not fair to judge a man—or a boy—under severe nervous strain, the impression is important. The author once had the pleasure of attending a meeting of an organization committee of a new bank, where applicants for an executive position were to be interviewed. Man after man was ushered in, and cross-examined, rather too pointedly for the applicant's comfort; but when the right man came along, the committee quickly agreed that he was their man.

THE NEW RECRUIT

When the new recruit arrives he should be shown around the bank, made acquainted with the men, where they are, their names, and his general duties. He should be told certain things and not be left to find them out for himself. He should have the rules of the bank explained to him, and be placed in charge of the one next higher up for coaching. In New York there is a little book which gives the clearing-house numbers, location of banks, etc., all of which he will speedily learn as he begins his work. Clerks who handle money or valuables of any sort, in fact, all bank men are, as a rule, bonded. Personal bonds are now quite rare, the usual surety bond being common, easy to get and affording no embarrassment to anyone. The fee is usually paid by the bank, as it should be.

One of the requisites of a bank clerk is that he be a good adder, and the beginner cannot do better than to take a few lessons in adding. Let him, as he gets an odd moment, make a few slips of figures on the adding machine, and add them up, turning the footings under until he has finished. The machine will correct his mistakes. Let the list be made

longer and longer, until it assumes considerable length, and he will soon learn the fine art of addition. Let him also practice on the adding machine and typewriter as occasion warrants, until he can operate both with ease. Some clerks by reason of the mechanical adders have become so accustomed



THE ADDING MACHINE AND ITS WORK
(Courtesy of the Adder Machine Co., Wilkesbarre, Pa.)

to machine additions that after being in a bank two or three years are still unable to add correctly a half-dozen amounts. I have seen a clerk leave his desk and take as much time in walking to a machine as would be required to foot the few amounts he may have on a little piece of paper. Again, I have seen a bookkeeper who lacked confidence in his own mathematics, with a ledger propped up on two or three stools, footing his pages, with the aid of an adding ma-

chine. And the chances are that when he copies the footings he will get them on the wrong pages. Of course, it is against the rules, but I suppose the poor fellow's brain is so fagged with its unaccustomed task that he feels he must call in some mechanical aid. I have heard that in some banks a rule is in force that no clerk shall foot less than a certain number of items on a machine. But I don't know who watches them and counts the items. The department heads must have little time for anything else.⁶ Arithmetic, especially interest computations, may well be studied.

Many large institutions keep a record of all employees, when they begin work, salary, time of arrival at and departure from the bank, vacations, sickness, etc., as a check upon the man himself as well as a part of the machinery of the bank. Some check by time clock, others by a record kept at the door,⁷ and signed by the employee, and some banks keep a record of errors made.

THE CHIEF CLERK

The executive head of the accounting force is the chief clerk, or some other official, who does the same work under another title, sometimes assistant cashier, who is charged with the duty of keeping the machinery working smoothly. He endeavors to get the best results with the least expenditure of the bank's time and money, remembering that cheapness is not always conducive to economy in the long run. He controls the records of the bank. He not only sees that they are properly kept but properly stored and made available for reference. Sometimes the hiring of the force is left to the chief clerk, although applicants may be interviewed by men higher up.

A good man quickly distinguishes himself. He stands out by the quality of his work. It is so in school; it is so in life and in business—we can pick the winners. Bank clerks are but men, and it is a fine art to select the apt and the quick from the plodders; the ambitious from the satisfied, the slothful, the indolent. The thing to do is to get the force, which may be a mixture of all, working together

⁶N. D. Alling before New York Chapter, A. I. B.

⁷There is a time-keeper in New York, who knows at sight each of the five hundred employees, and keeps a record of their coming and going.

smoothly; prevent jealousies; deal out justice; pay fairly; promote wisely; and in all things remember that the Golden Rule has its place in banking.

The chief clerk will be on the lookout for improved systems, short and better methods, aiming to keep the expenses of the bank down by using mechanical appliances wherever possible—doing with a rubber stamp or the printing press many things that have heretofore been done by hand.

RUBBER STAMPS

It is amazing and amusing to discover how short-sighted many in authority are. In a certain department store sending out thousands of bills monthly, the management never thought so far as to have the date printed on enough forms for a month's use; for to write the date and the words "To bill rendered," five thousand times must have taken at least one day's time of the clerks who made out the statements. It is in the little things that time and energy are saved. The motto should be: "Never do by hand that which can be done better by machine; and never attempt to do by machine that which requires a head."

It is well to distribute the work so that there will be an even grind and not spasmodic rushes. Men do good work under pressure, but they should not be rushed. It is better to have an even pace than a lull and a rush, a rush and a lull, for the tension is relaxed and it is difficult to speed up. In one large bank there are two busy periods, July and January, with only a moderate amount of work in between, because the management could not devise a scheme to distribute the work more evenly. For six weeks in the year the clerks are literally worked to death; while in the other forty-six they are just comfortably busy.

In large banks a force, sometimes known as "floaters" or "the flying squadron," is kept available to be pressed into service in various departments at different times in the day, in order to have a large force where the volume of work requires. Where the work is heaviest the reserves are placed to strengthen the regular employees of the department.

A savings bank in Brooklyn makes it the rule to keep its men busy: not too busy, but occupied all the time. If a clerk remains after the others have finished, the cause is

inquired into and if he is overworked, the burden is distributed. If he is slow he is coached; if he is lazy his health is inquired into, and if he is unfit they get him another job. If work must be done on a holiday the clerks may come, though not compelled to, and get a generous fee for sacrificing the holiday—but the whole force shows up. But this institution is one of the few conducted on a broad plane of humanity, with an exceedingly fine *esprit de corps*.

THE ART OF HANDLING MEN

It is a fine art—this art of handling men; of winning their confidence. When your force works because they like you, and not because they are afraid of you; when they do as good work while the schoolmaster is out as when he is in; when they give up a holiday willingly because they see the

CREDIT CLERK—PROOF SHEET

For				191			
DEBITS			Folio	ACCOUNT	CREDITS		
					Debit Clerk		
					Loan Department		
					Collection Department		
					Coupon Department		
					Paying Teller		
					Receiving Teller		
					Trust Department		
					Reorganization Department		
					Securities Department		
					Foreign Department		
					Transfer Department		
					Mail Teller		
					Total Departmental Balances		
					Banks and Bankers Ledger		
					A—B		
					C—E		
					G—H—I		
					F—J—K L		
					M—O		
					P—R		
					S		
					T—Z		
					Suspended Balances		

PROOF SHEET—CREDIT CLERK

need, and do it for your sake—then you have won your men, and you will have no trouble with anarchy in the ranks or ink spots on the ledger.

In a large bank it seemed needful at one time that the force be corrected for a few things that were occurring that did not make for discipline. The officer—nearly as young as the youngest—called them together and said a few kind words, which they understood—and obeyed willingly, because they understood and saw the logic of it all; and as they went back to work, one by one they thanked him for what he had said, but most of all, the way in which he had said it. You need not knock a man down to make him see the point—it may be he will see it easier if you lift him up!

A certain other bank worked on the principle that to do anything for the men would show that the administration was kind—which wasn't so. When a rebuke was necessary, it was given in such a way as to leave a sting. When actual correction was needful it was not correction, but abuse. The county fair was a yearly occurrence. It was the big event of the year. The bank work was brisk in the morning and slack in the afternoon; yet for ten years not a clerk in the bank had seen the fair. The manager didn't think it necessary that they should. He didn't care about it, why should they? But when a new officer took hold and suggested that by dividing the work properly all could have an afternoon—but himself—it was found that no one was injured, all were pleased, and nothing happened. It was merely a bit of thoughtfulness.

It is needless to say that errors should not be covered up. Some banks will not allow an ink eraser in the place, requiring all errors to be initialed and crossed out, while others are more liberal; but it must be understood that errors must be reported, and if the rebuke is kind, but firm, it will have its effect. Be frank with your men; ask them to be frank with you, but above all things remember that to be kind costs no more than to be ugly and you lose more than they by ill treatment.

It may be necessary in some banks to place the men under a time-clock or similar check as to their going and coming; but if the force is not too large it will do as well to

put the men on their honor. All men have that, or it can be developed, and it is better to work on this than to place too many checks on the moral side of their work.

DAYS OFF

Some men will take advantage of a bank's goodness in allowing days off, and while a day off is not to be despised, it can be overdone. Some savings banks give each man a day's vacation a month, so that there is no excuse for asking for any additional time unless necessary. Other banks never allow any days off except the regular vacations. A book might be kept or a card record, showing the days off, and the reason. Vacations should be insisted upon, both as a matter of good health and as affording an opportunity to check the work, particularly if it is handling money. It gives the other men a chance to learn the work, and is a desirable thing all 'round, except in those banks where the force is so small and overworked that it means temporary help, which is always more or less unsatisfactory, or overburdening those who remain behind. Some banks have formal blanks for leave of absence, and these when filed may be used as the basis of the records of the employees. There must be a system in a large bank if all these minute details are to be properly recorded.

PENSIONS FOR EMPLOYEES

Some banks operate a pension system for their employees. A small percentage of their wages is withheld each month, going to the credit of a fund in the name of the employee, and when the employee leaves the service of the bank before the age of retirement for any cause other than disability occasioned by illness, the amount which has been contributed by him to the fund is returned.

Semi-annually the bank contributes to the fund an amount equal to or in excess of the aggregate of the contributions by all of the employees, and from this fund, made up of voluntary contributions from both bank and employees, a percentage of his average wage during his time of service is paid from the time of his retirement semi-monthly during life.

PURPOSE OF THE RECORDS

The bookkeeping records of the bank culminate and find expression in the statement of condition, which has already been analyzed. The "Statement of Condition" must be distinguished from the "general ledger statement" which it resembles, and from which it is made. The distinction lies in the fact that in the statement of condition the nominal accounts, such as expense, interest, rents, etc., are omitted, and only the real assets and liabilities are shown. The statement of condition goes to the Comptroller of the Currency and to State supervising officials and is published in the newspapers in condensed form; while the statement taken from the general ledger daily is used for the guidance of the bank's officers, as well as to test the balancing of the books. The purpose of the records is, to repeat what has been said at the beginning of the chapter: (1) To keep a chronological record of the increase or decrease of the assets of the bank; from whom value is received and to whom value is due; (2) the profit or loss that attends the operation of the bank; and (3) the financial status. If we had no record of the daily events, we would not be able to know the state of or the avenues of the indebtedness as it exists; and if we had no record of the property which came in or the property which went out of the bank, we could not know the financial position or status at a given time. We could not keep the equilibrium.

The purpose of the accounting records is, therefore, to keep this balance, and for every debit there must be a credit somewhere. If the depositor's account is increased, as expressing the increased liability of the bank, there must be an asset to correspond. The reason we have an "over" or a "short" is, the equilibrium has been disturbed. The teller has, for instance, increased the liability of the bank, say \$100, by receipting for the \$100 in the depositor's pass-book, and, therefore, set up a liability to the depositor in that sum. He has, however, on the other side but \$90 as an asset in cash, or a check for collection, or some other item, and the equilibrium is out of true, and there is a "shortage." He can only right the balance by a journal entry, which sets up a nominal account in place of the missing asset. Therefore, he makes a charge to "Overs and Shorts" in the sum

of \$10, which takes the place of the \$10 in the cash. He might charge the depositor the \$10 and thus reduce the liability of the bank; but he cannot do this without warrant, and so must proceed on the first mentioned plan. With this brief statement of the fundamentals of accounting, which every bookkeeper must do, if not understand, we are prepared to spend a little time in the bookkeeping department to see how these records are kept; not going into detail too closely, but working on general principles. for in the last analysis they are all alike in principle but differ in detail. There must be an account with every asset, real and nominal, and with every liability, all coming together in the general ledger, and finally in the statement.

THE GENERAL LEDGER

The general ledger, following the accounting principle that a ledger is but a summation of the other records, which it controls, holding the totals, while the other records contain the details, must have an account for every class of property, every class of instrument, and every nominal account that is needed to record the work of the bank. As new elements arise, new accounts are opened. If the bank had no banking-house of its own, there would be no "banking-house" account. If it received no rents, there would be no "rent" account; but as soon as it bought a site for a banking-house, there would be raised a real estate account to record the purchase. If it rented part of the building, it would set up a rent account, and so on, the ledger building itself to conform to the changing status of the bank. This record is preferably kept in loose leaf form, unless the bank officials are biased against this method, when it would be a bound volume. It lasts considerably longer than other books of record, and may be properly bound, but the loose leaf book has so many advantages, such as dividing the book into sections, large or small as needs require, etc., that the loose leaf form is highly efficient as a book for the general records.

CONTROLLING ACCOUNTS

It would be possible, of course, to keep all accounts directly in the general ledger, even those with depositors, but

this would be such an overwhelming task that it has been found necessary to take the accounts one by one out of the general ledger, as the work became too voluminous for that book, and segregate the work into units, carrying the totals only to the ledger.

And so as one class of accounts become numerous they are taken out of this record and placed in another book. Accounts with banks are of this sort. A country bank having but a few correspondents could easily carry them in the general ledger; while a city bank, whose accounts number thousands, would divide and sub-divide these accounts, alphabetically, or geographically, into as many groups as were necessary.

The controlling account on the general ledger is charged with all debits made to these accounts and credited with all credits, so that the sum of the balances on the one will equal the balance shown on the other. The principle of the controlling account is the same as if we were dealing with a person, crediting him with what he brings and charging him with what he takes. If we deliver to a ledger fifty items, we charge the ledger that amount; if fifty items are paid out on a ledger we give it credit, and the balance is the amount due from that ledger to the accounting system.

The accounts that ordinarily would be found in a general ledger are:

ASSETS.

- Demand loans (classified if desired).
- Time loans (classified if desired).
- Discounts.
- United States Bonds to secure circulation.
- United States Bonds to secure United States Deposits.
- United States Bonds on hand.
- Bonds and Stocks (total or in detail).
- Banking House and lot.
- Other Real Estate.
- Furniture and fixtures.
- Due from Federal Reserve Bank.
- Due from approved reserve agents.
- Due from other banks and bankers, savings banks and trust companies.
- Cash.
- Redemption fund with the U. S. Treasurer.
- Expense account.
- Taxes.
- Rent account (if bank own its building).
- Salaries.
- Interest accrued.
- Exchange paid.
- Interest paid on securities bought, etc.
- Premiums.
- Other nominal accounts.

LIABILITIES.

Capital.
 Surplus.
 Undivided profits.
 National Bank Notes Outstanding.
 Due to banks and bankers.
 Due trust companies and savings banks (generally reported separately as to savings banks.
 Dividends unpaid.
 Individual deposits.
 Demand certificates of deposit.
 Time certificates of deposit.
 Certified checks outstanding.
 Cashier's checks outstanding.
 United States deposits.
 Interest received (income).
 Discount received.
 Exchange received.
 Other nominal liabilities.

On the general ledger or in the bond ledger there would be a separate account for each bond or block of bonds bought; each piece of real estate, etc. If the accounts with other banks were numerous as obtains in New York and other reserve cities, these would be taken out of the general ledger and kept in a separate book, totals only being carried to the general ledger.

JOURNAL ENTRIES

The journal is used to record the items day by day that go through the bank, and from which postings are carried to the general ledger. The totals from the discount book, individual ledger records, etc., are carried to the journal and from thence to the ledger. The ledger is not a book of

THE NATIONAL EXCHANGE BANK, BRANCH NO. 24

ACCOUNT NO.	NAME	ADDRESS
1001	John Doe	123 Main St., New York
1002	Jane Smith	456 Elm St., New York
1003	Robert Brown	789 Oak St., New York
1004	Mary White	101 Pine St., New York
1005	James Green	202 Cedar St., New York
1006	Elizabeth Black	303 Birch St., New York
1007	William Gray	404 Spruce St., New York
1008	Anna Hall	505 Ash St., New York
1009	Charles King	606 Hickory St., New York
1010	Sarah Lee	707 Walnut St., New York
1011	Thomas Scott	808 Chestnut St., New York
1012	Patricia Adams	909 Sycamore St., New York
1013	George Baker	1010 Maple St., New York
1014	Laura Miller	1011 Poplar St., New York
1015	Frank Wilson	1012 Willow St., New York
1016	Helen Moore	1013 Dogwood St., New York
1017	Edward Taylor	1014 Magnolia St., New York
1018	Grace Jackson	1015 Rose St., New York
1019	Harold Evans	1016 Tulip St., New York
1020	Virginia Foster	1017 Iris St., New York
1021	Clarence Phillips	1018 Dandelion St., New York
1022	Norma Turner	1019 Sunflower St., New York
1023	Albert Long	1020 Lavender St., New York
1024	Betty Hill	1021 Zinnia St., New York
1025	Harvey Scott	1022 Marigold St., New York
1026	Frances King	1023 Pansy St., New York
1027	Walter Lee	1024 Petunia St., New York
1028	Joseph Adams	1025 Begonia St., New York
1029	Marion Baker	1026 Impatiens St., New York
1030	Samuel Miller	1027 Verbena St., New York
1031	Edith Wilson	1028 Zinnia St., New York
1032	Charles Moore	1029 Pansy St., New York
1033	Anna Taylor	1030 Marigold St., New York
1034	Frank Evans	1031 Petunia St., New York
1035	Grace Foster	1032 Dandelion St., New York
1036	Harold Phillips	1033 Sunflower St., New York
1037	Virginia Turner	1034 Lavender St., New York
1038	Clarence Long	1035 Zinnia St., New York
1039	Norma Hill	1036 Marigold St., New York
1040	Albert King	1037 Pansy St., New York
1041	Betty Lee	1038 Petunia St., New York
1042	Harvey Adams	1039 Begonia St., New York
1043	Frances Baker	1040 Impatiens St., New York
1044	Walter Miller	1041 Verbena St., New York
1045	Edith Wilson	1042 Zinnia St., New York
1046	Charles Moore	1043 Pansy St., New York
1047	Anna Taylor	1044 Marigold St., New York
1048	Frank Evans	1045 Petunia St., New York
1049	Grace Foster	1046 Dandelion St., New York
1050	Harold Phillips	1047 Sunflower St., New York
1051	Virginia Turner	1048 Lavender St., New York
1052	Clarence Long	1049 Zinnia St., New York
1053	Norma Hill	1050 Marigold St., New York
1054	Albert King	1051 Pansy St., New York
1055	Betty Lee	1052 Petunia St., New York
1056	Harvey Adams	1053 Begonia St., New York
1057	Frances Baker	1054 Impatiens St., New York
1058	Walter Miller	1055 Verbena St., New York
1059	Edith Wilson	1056 Zinnia St., New York
1060	Charles Moore	1057 Pansy St., New York
1061	Anna Taylor	1058 Marigold St., New York
1062	Frank Evans	1059 Petunia St., New York
1063	Grace Foster	1060 Dandelion St., New York
1064	Harold Phillips	1061 Sunflower St., New York
1065	Virginia Turner	1062 Lavender St., New York
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1092	Harold Phillips	1089 Sunflower St., New York
1093	Virginia Turner	1090 Lavender St., New York
1094	Clarence Long	1091 Zinnia St., New York
1095	Norma Hill	1092 Marigold St., New York
1096	Albert King	1093 Pansy St., New York
1097	Betty Lee	1094 Petunia St., New York
1098	Harvey Adams	1095 Begonia St., New York
1099	Frances Baker	1096 Impatiens St., New York
1100	Walter Miller	1097 Verbena St., New York

INDIVIDUAL LEDGER

original entry, and the journal is used as in all bookkeeping methods to record the daily events, but not to classify them. Therefore, we run the journal for this purpose. If real estate were bought, bonds bought or sold, salaries paid, etc., it would be a proper journal entry. Each department might run its own journal, or the totals might be reported to the journal clerk for entry on the general journal. Thus, if individual deposits as ascertained from the slips and from teller's record were \$10,000, "individual deposits" would be credited with the same amount, and technically cash would be charged. But since all records are of cash, the charge to cash does not appear. Likewise checks paid are charged to individual deposits and cash technically credited. Items coming in from other banks are credited to them; items sent them are charged. Expenses are likewise charged, and interest credited. There is no journalizing as journalizing is commonly known, the journal being a cash journal, the entry on one side or the other operating to debit or credit cash. Thus we do not say "Cash Dr. to Individual Deposits," for the mere entering on the credit side operates to charge cash. It is the purpose of the journal to assemble the amounts from all over the bank and aggregate them for posting to the general ledger.

THE ACCOUNTS WITH DEPOSITORS

The individual ledger bookkeeper has no easy task. His work is a grind. In some banks he is an old man, in others a mere boy; but whatever the age, he grinds, and grinds, and grinds. He should, first of all, be easy with the pen, and make good figures. Good figures carefully made make good-looking books, but in the haste to get the grind over for the day much damage has been done to the looks of the books and ink spots follow.

It is the duty of the individual ledger bookkeeper to keep the accounts with the individual depositors. He should not write up pass-books, this balancing being done in large banks by statement and balancing clerks, who make the debit entries in the pass-book or on the statement sheet from the vouchers, as a check upon the work. These accounts are kept in the main by the Boston Ledger, an old idea, but still used to a very large extent.

THE BOSTON LEDGER

Briefly described the Boston Ledger is a large book, with the names of depositors, as a rule, printed down the left-hand margin, or left and right both, or center, allowing space for new accounts. Running across the page there are a number of spaces, one for each day, with a column for the deposits, checks and balance. Some have a column for the items in detail and a column for the total, so that one subtraction only is necessary. The total of the deposits must equal the total received by the teller and charged to the bookkeeping department, and the total checks must equal the total checks charged likewise by the paying teller. Overdrafts are carried in red in the balance column, and so are not footed. Each page may be proven by itself.

The old Boston Ledger is a long-time favorite and has many devotees. The names are usually printed in alphabetical arrangement, spaces being left for new accounts in their proper place. The author has found that a scheme of bookkeeping can better be understood by a study of the form than by an attempt to describe it, and the reader is, therefore, referred to forms shown herewith for ideas as to the work of the Boston Ledger. It has been in use so long and in so many banks that it has become part of the banking machinery of the country and recognized everywhere as a labor saver.

The work of an individual bookkeeper consists largely in adding credits to and subtracting the debits from the old balance. The deposits are posted separately, but it is common practice to post the checks in total, several checks constituting one charge. Before the items are entered on the ledger it is customary to run them off on an adding machine or on a "scratcher," so that the total debits and credits to that ledger may be known to effect the proof. Items other than regular deposits and checks are designated by the letters "N" for note; "D" for discount, and "C" for collection.

Some banks have a column to which are posted the clearing-house items, the total of this column equaling the total clearings received. Some banks list these items in a journal, using the adding machine, and write the name of the maker in between the figures, as a skeleton proof of

the clearings. If this is divided according to ledgers, of course the amount that goes on the ledger must be the same as the machine list.

Where the pass-book is balanced a mark is made opposite the date to indicate that up to that point the vouchers have been returned and the book balanced. It is well to use the abbreviation "Bal." in red to indicate the fact.

MERITS OF THE BOSTON LEDGER

The advantages of the Boston Ledger are the quickness of posting and the daily proof, it being ideal in this respect. Of course, it does not show the depositor's record over a length of time, usually not longer than six months, but this information can be kept on the average book.

The disadvantage of the Boston Ledger is the fact that unless much space is given to active accounts the details of the checks cannot be crowded in. Where a firm is known to have a large number of items, the account can be carried at the back, on a page ruled for that purpose. Or, the checks might be added by machine, the slip attached and the total listed as one item, as, for instance, "7—\$175.63," means that seven checks total \$175.63, and are posted as one, and will be found pinned together in the files. By this arrangement a great many checks may be entered with a few charges.

Postings are made directly from the tickets and checks, and the total of the credits must equal the total received by the receiving teller, and the total of the debits the total of the checks turned in by the paying teller. It is, therefore, easy to locate an error. Each page may be balanced by itself, still further running the error down to a single page. Some banks enter the different transactions in colored inks; as, for instance, the clearing-house debits in green; checks paid over the counter in black; balances in red, etc., the intent being to designate the class to which the item belongs.

There are many modifications of the Boston Ledger, all based on the original idea—that of reducing the work to the minimum, making the postings quickly, and with ready proof. A bank contemplating a change in its methods

protecting devices must agree with figures; signatures to checks under power of attorney; transfer of funds of corporation by officer to individual account; certified checks; notes that are to be charged to customer's account must be due; "no account"—careful search being made before returning the item as unpaid.

The bookkeepers in large cities are often mere boys, and generally not mature men, and, therefore, need attention and coaching. They must be warned to look out for suspicious points about a check. They must be on guard to catch forgeries. They must post the right amount to the right account, and not get names confused.

There is a great difference in bookkeepers in this regard. Some will post anything as long as it resembles or reads like the man's name. In fact, the color of the check is enough sometimes, while another will detect a discrepancy in a signature in an instant. This idea of instructions might be applied to all of the other departments, but I have particularly mentioned bookkeepers as they are apt to be younger as a class, because it is the first responsible position that a clerk usually is given.⁸

THE AVERAGE BOOK

It is customary to keep a record of all depositors, particularly with reference to their average balance. This is done on a card, properly ruled, showing the actual or average balance at certain periods. By the use of the balance ledger it is an easy matter to obtain this information, the balance for each day being listed on an adding machine and divided by the number of days. Some banks loan according to the average balance and it is important to know what the average balance is. This may be the average daily balance, or the average monthly balance, preferably the average daily balance, as it more accurately portrays the actual condition of the account. The average monthly balance is obtained by dividing the average daily balance for the twelve months by twelve. The average amount of discounts is also sometimes kept, in order to ascertain the proportion of loans to deposits; but the customer's liability to the bank, direct and contingent, is often kept by the liability ledger,

⁸N. D. Alling before New York Chapter.

which shows the amount of the customer's direct indebtedness and the amount for which he is secondarily liable on discounts.

RENDERING ACCOUNTS STATED

The old method of rendering an account stated with the depositor of a bank was to balance his pass-book, return his vouchers, and if no complaint was made, to consider the balance as correct. This still obtains in many places, the returned vouchers being listed on an adding machine and only the total carried into the book "as per list." But numerous cases of forgery having gone through the courts where depositors have made claims against the bank for forgeries that occurred a considerable length of time before complaint was made, legislation has now in many cases made it obligatory upon the depositor to make claim for forged checks within a certain length of time after receiving his balanced account stated or be estopped to claim the benefit of the law of forged instruments. Banks, as a rule, now require the statement to be acknowledged, and vouchers receipted for as a record that the account is in agreement with the customer's account and the vouchers have been examined.

It is but fair that the bank be put on guard if any irregularities exist in the relations with the customer, and the verification of vouchers and acknowledgment of the correctness of the account are of utmost importance to both. If irregularities exist they will the sooner be detected if prompt and authentic verification obtains; and as a matter of good business and good banking every concern should have proper reconciliation made with its bank periodically. It should be done by one other than the regular clerk or officer who draws the checks and handles the cash.

THE STATEMENT SYSTEM

The statement system is a sort of duplicate ledger, kept as a check upon the work of the individual bookkeepers and as a record to send to the depositor at the close of the month: for statements are rendered, as a rule, monthly in this scheme. Moreover, it keeps the vouchers from accumulating, some concerns under the old method sending in

The statement system has many points of advantage. First, it checks the postings; second, it checks the balances; and third, it eliminates the writing up of the pass-book.

HEXAD: 7, 8, 9, 10, AND 11; OCTAL: 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839,

IN ACCOUNT WITH

If no errors are reported, return the data. If a warning

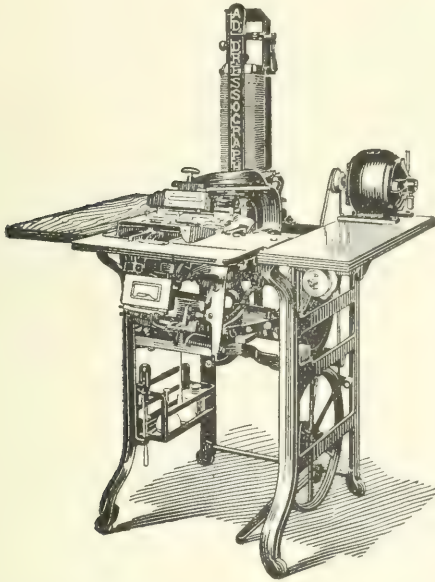
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[illegible]

STATEMENT USED IN THE STATEMENT SYSTEM IN PLACE OF BALANCING PASS-BOOK

When the bookkeeper has made his postings, the tickets and checks are sent to the statement clerk who enters the items on his sheet in detail or in total as may be decided upon, and strikes the balance, extending the same to a perforated stub at the side. At the close of the day the balances are called back, and must agree. If error has occurred in posting to wrong account, or omitting a check, it will here be detected. At the close of the month the vouchers are checked back with the statements, and a balance struck, and the sheet with vouchers sent to the depositor for

his guidance, the stub remaining in the bank. Balances are, of course, carried over to a new sheet for each depositor as the basis for the next month's work. The addressing machine is coming into play here as a ready means of listing



ADDRESSING MACHINE AND ITS WORK (BELOW)
(Courtesy of the Addressograph Co., Chicago, Ill.)

the headings for these accounts. It is a quick and most excellent method of keeping the accounts with depositors. A slip is enclosed, asking the depositor to report promptly the receipt of vouchers and to verify the balance.

A	
ANDERSON & CRAWFORD, 1921 BROADWAY, NEW YORK, N.Y.	
Business.....	Catalogues
Rating.....	
Customer.....	
ANDERSON & CRAWFORD, 1921 BROADWAY, NEW YORK, N.Y.	

OPENING A NEW LEDGER

Comparatively a few years ago the only system of keeping the individual accounts in banks was the old three-column balance ledger and the "Boston" ledger. Both of these ledgers were permanently bound volumes, and when one was filled up it was necessary to open a new book and transfer all the names and balances from the old ledger.

Within recent years, however, there has been almost a transformation in bank bookkeeping. Improved methods have been introduced. One of the most important is the loose-leaf system of keeping the individual ledger. The greatest value of the loose-leaf ledger lies in the fact that it eliminates the necessity of opening new ledgers and transferring accounts. There are also other advantages which it possesses. In spite of these facts, however, there are still many banks that cling to the old bound ledgers.

The opening of the individual ledger in a bank is a difficult task. The individual bookkeeper's time in the average bank is usually fully taken up with the daily routine of posting and proving his ledger, and although the opening of a ledger requires hours of extra work, it must not interfere with his regular daily transactions. This is possible only by putting in a great deal of time after the usual banking hours. Some bookkeepers have been known to work all night in order to get all the balances transferred from one

	A	E	I	O	U	Y	Totals
A.....	60	100	55	40	25	10	290
B.....	110	140	96	103	80	30	559
C.....	79	93	52	60	24	11	319
Total No. of pages for accts.	249	333	203	203	129	51	1168

FIGURE 1.

ledger to another. Because it is such a tremendous task, they are apt to put it off as long as possible. When they do so the accounts soon begin to "overlap," and when they are thus confused, posting is slower and less accurate.

Some banks that use the bound ledger purchase books only of ordinary size and have a custom of opening new ledgers at certain regular periods, usually January first of each year. Even though the old ledger is not filled a new book is opened at these stated periods. It is advisable, however, to use ledgers as large and thick as possible, and yet capable of being properly handled. The longer the book can be made to last the better it is. It not only defers the arduous labor of opening a new ledger, but it is more convenient for reference, etc., as it keeps the accounts under one cover extending over longer periods.

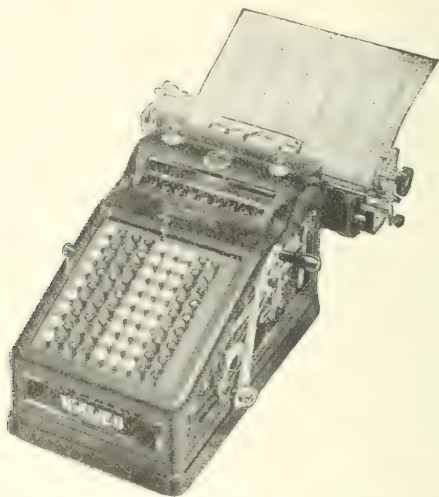
When an individual ledger is to be opened the first thing to be done is the "spacing" of the new ledger. In order to properly space the ledger the bookkeeper must approximate the number of pages that are to be assigned to each account from the old ledger. To do this he must go over the accounts carefully in the old ledger and determine how much space each has used within a given time.

Some bookkeepers simply begin by copying the names from the old ledger approximating the amount of space to be given to each as they go along, and following the order of the accounts in that ledger. This, however, is a poor method, as the accounts in the new ledger in nine cases out of ten should not follow in the same order as those in the old ledger. The chances are that some accounts have overlapped and many have been crowded into spaces in which they do not logically belong. The pages cannot be apportioned with any degree of accuracy at all when this scheme is used.

Of course, in spacing a ledger and entering the names of the depositors, the balances are not forwarded at the same time. The spacing is accomplished and all the names are entered before any of the balances are transferred. The bookkeeper does not attempt to space his ledger and forward all the names in one day. In fact, most of them begin about a month before the date set for forwarding the balances to apportion the pages and copy the accounts.

Another method used is to write the names of depositors

on slips of paper, with the number of pages to be allotted to each account, and insert each slip in the ledger at the page the account is to occupy. This method, though not entirely satisfactory, is much better than the first. If the spacing does not work out right under certain letters of the alphabet, the slips may be easily removed and replaced to readjust the apportionment. After the slips are all inserted, the names are copied in the book from them. The loca-



ADDING MACHINE AS USED FOR BANK STATEMENTS SPECIMEN OF WORK P. 303
(Courtesy of the Adger Machine Co., Wilkesbarre, Pa.)

tion of each following account is determined by the location of the slip in the ledger and the number of pages indicated on the slip.

MAKING ALLOWANCES FOR NEW ACCOUNTS

In spacing a new ledger, allowance must of course be made for new accounts which are likely to be opened during the life of the ledger. This space should be apportioned as accurately as possible, as a failure to do so is sure to cause the overlapping of the accounts. For instance, suppose the space apportioned to the vowel "i" under A has been filled with new accounts and a man by the name of Aikens opens an account. This account will then have to be entered under some other vowel in the space probably already apportioned to some other account. This account will consequently run

into the account which has been crowded into the space which did not belong to it.

To secure accuracy in the spacing of a new ledger it is necessary to divide and sub-divide the ledger; that is, so many pages are first to be apportioned to each letter of the alphabet and each letter is sub-divided into vowels, so many pages being given to each vowel. Of course, all ledgers should have the vowel index, as with it the accounts can be located with greater ease and dispatch. The index is usually bound in a separate cover from the ledger, as an index in a large, cumbersome ledger would be rather inconvenient for reference.

McNally Bayes & Deale IN ACCOUNT WITH

THE UNITED STATES NATIONAL BANK
OF OMAHA, NEB. June 1911

PLEASE EXAMINE AT ONCE. If no errors are reported within ten days the account will be considered correct.

NO.	CHECKS	CHECKS	CHECKS	DATE	DEPOSITS	INT.	PAYOR BALANCE	BALANCE
1	335.56	400.00	32.50	BALANCE	1 500.00	1	1 500.00	1 636.70
2	87.92	2.50	161.20		500.00	2	200.00	1 710.00
3	93.91	75.75	33.40		50.75	3	1 710.00	1 360.75
4	321.12	134.60	4.57		1 700.00	4	1 360.75	1 239.00
5	123.50	100.00	4.50		4 325.25	5	1 239.00	3 127.85
6	65.75	45.00	7.00			6	3 127.85	2 505.08
7	201.01	134.76	183.45		500.00	7	2 505.08	2 398.20
8	45.43	505.11	4.00		100.00	8	2 398.20	2 322.71
9	65.43	56.34	12.50		757.75	9	2 322.71	2 598.38
10	15.00	49.43	4.20		2 000.00	10	2 598.38	1 158.38
11	10.00	56.52	100.00		750.00	11	1 158.38	777.74
12	50.00	4.32	6.00		2 000.00	12	0.00	777.74
13	7.70	12.56	200.00		1 500.00	13	777.74	1 422.77
14	20.00	45.76	10.00		50.00	14	1 422.77	1 073.03
15	12.00	234.98	65.00			15	1 073.03	563.43
16	8.75	45.00	125.00		5 000.00	16	563.43	4 190.51
17	200.00	345.76	50.35		345.75	17	4 190.51	1 536.26
18	300.00	32.34	5.92		450.00	18	1 536.26	1 200.69
19	200.00	50.00	75.62		400.00	19	1 200.69	820.15
20		5.00	134.29		2 500.00	20	0.00	1 638.08
21		10.75	572.75		250.00	21	1 638.08	1 099.09
22		65.75	60.00			22	1 099.09	363.08
23		400.00	909.88		3 235.40	23	363.08	3 048.86
24		32.34	2 435.40		1 000.00	24	3 048.86	1 547.24
25		32.50	150.50		550.75	25	1 547.24	1 075.04
26		587.65	37.23		400.00	26	1 075.04	3 775.04
27		345.43	200.00			27		
28		3 000.00	37.50			28		
29		400.00	45.90			29		
30		75.00	234.56			30		
31		134.23	505.11			31		
32		56.34	56.34					
33		876.54	45.43					
34		45.43	56.54					
35		5.53	3.50					
36		125.25	50.00					
37		987.45	65.45					
38		500.65	21.45					
39		34.50	54.31					
40		7.20	345.76					
41		231.14	98.56					
42		87.63	13 400					
43		45.67	345.76					
44		324.35	876.53					
45		100.00	321.00					
46		367.82	34.87					
47		310.70	343.86					
48		55.67	12.34					
49		1.00	45.76					
50		75	500.00					
			BALANCE		3 775.04			

PLEASE CALL FOR STATEMENT FIRST OF EACH MONTH
NOTIFY BANK IF YOU CHANGE YOUR ADDRESS

STATEMENT RENDERED DEPOSITORS MONTHLY
(Courtesy of the Adder Machine Co., Wilkesbarre, Pa.)

One method used by some banks, which will probably secure the most accurate spacing of the ledger is that outlined by Mr. Patten in his work on "Practical Banking," as follows:

"We should now take the old ledger and ascertain the length of time it has been used and estimate the number of pages each account will require in the new ledger, noting same in pencil in front of the name in the index. After this process has been completed, add the number of pages allowed for the accounts in each vowel, then prepare a diagram like Figure 1, which is prepared on a basis of an A to C, 1,500-page, ledger, and enter the number of pages allowed for each vowel.

"On the diagram shown there is a total of 290 accounts in 'A' divided among the vowels; 'B,' 559; 'C,' 319; making a total of 1,168 open accounts. The footing of the accounts is proven by both vertical and horizontal addition of totals, which should always be done, or one may be thrown out on the general result. Deduct the whole number of pages allowed to the accounts on the index from the total number of pages in the ledger, and you ascertain the number of pages to be distributed among the vowels.

"In the illustration there are 332 extra pages (1,500 minus 1,168 equals 332); therefore that number of pages is to be divided equally among the vowels. To find the number of pages to be allotted after each vowel, divide decimally the total of the extra pages allowed for the accounts, as follows: 332 divided by 1,168 equals .2842. Now multiply this quotient by the total number of pages allowed for each vowel, and the result, as per Figure 2, gives the number of pages to each vowel. These totals are also proved horizontally and vertically, which is of importance. Of course, in figuring decimally, one may be obliged on account of fractions to allot a few extra pages to the larger vowels to make the scheme prove, deducting them from another vowel.

"After you have carefully schemed out the number of pages, as in Form 2, add the total allowed in your estimate to the total of extra pages for 'A,' and the result gives you the page on which that letter should end, in this case page 373. Letter 'B' should commence on the following page and end on page 1091. 'C' should commence on page 1092 and continue to the end of the ledger. After this has been

	A	E	I	O	U	V	Totals
A.....	17	28	16	12	7	3	83
B.....	31	40	27	29	23	9	159
C.....	22	26	15	17	7	3	90
Total No. of extra pages..	70	94	58	58	37	15	332

FIGURE 2.

done enter in ink opposite each name in the index the number of the page on which the account is to commence, keeping a tally by adding to the page number the number of pages allowed for the account in question as per your pencil memoranda. Proceed carefully through the index, proving each vowel by adding the total allowed for that vowel to the previous footing, thus:

Total number of pages allowed for "Aa," as per scheme.....	60
(Last "Aa" should be entered on page 60.)	
Extra pages allowed for "Aa".....	17
	77
(Therefore the first "Ae" should be on page 78.)	
Total number of pages allowed for "Ae".....	100
(Last "Ae" should be entered on page 177.)	
Extra pages allowed for "Ae".....	28
	205

(Consequently the first "Ai" should be on page 206.)

"And thus proceed through the entire index. Any differences should be corrected, and each letter should end on the page previously determined upon."

A chart very similar to the one just described and represented by Figure 3 is used by some bookkeepers. In the extreme left-hand column are placed the letters of the alphabet, the six following columns are for the vowel sub-divisions of each letter. The last column shows the number of pages assigned to each letter. The large figures under each vowel represent the number of pages which are to be assigned to

	A	E	I	O	U	V	Total
A.....	¹ 60	⁶¹ 100	¹⁶¹ 55	²¹⁶ 40	²⁵⁶ 25	²⁸¹ 10	290
B.....	²⁹¹ 110	⁴⁰¹ 140	⁵⁴¹ 96	⁶³⁷ 103	⁷⁴⁰ 80	⁸²⁰ 30	559
C.....	⁸⁵⁰ 79	⁹²⁹ 93	¹⁰²² 52	¹⁰⁷⁴ 60	¹¹³⁴ 24	¹¹⁵⁸ 11	319
Total	¹¹⁶⁹ 249	¹⁴⁷⁸ 353	¹⁷⁵¹ 203	¹⁹⁵⁴ 203	²¹⁵⁷ 129	²²⁸⁶ 51	1168

FIGURE 3.

it. The small figures in the upper left-hand corner of each division show the number of the page upon which the bookkeeper is to begin writing the names under each vowel.

In spacing a ledger the bookkeeper should remember that as a rule the letters of the alphabet requiring the largest number of pages are B, C, H, M, S, and W. The letters U, X, Y and Z usually require fewer pages than any other letters. In fact, it is hardly necessary to subdivide these letters into vowels.

Another suggestion which might be of some advantage in spacing the ledger is to enter the letter and vowel on the upper corner of each page to which it belongs. This method practically indexes the ledger all the way through and makes it unnecessary to consult a separate index. It will also assist in posting.

When the bookkeeper has succeeded in spacing his ledger the most important part of the task of opening the new ledger is accomplished. Taking the index or the charts as prepared, he can enter the ledger headings with sufficient assurance that in the end it will figure out right. After the new ledger has been properly spaced and all the names transferred, the next step is to transfer the balances.

Before doing this some accounts that have been carried for some time in the old ledger can be weeded out. Some accounts will perhaps have only a few cents' balance which has been standing for a long period. Some of them

may have been dead for months. The balances have been left standing either because the depositor is dead, has moved from the city, or has simply neglected to withdraw it and close the account. When such balances are only a few cents, the bank is usually safe in charging them off and closing the account. These balances may be credited to profit and loss, but of course a proper memorandum should be made of the transaction, so that any time the depositor asks for a statement of the account, the amount could be credited back to his account.

There will be other accounts with larger balances, which perhaps have been opened temporarily for some particular purpose, and although dead, the depositor has neglected to withdraw his balance. Such depositors should be notified to check out the balance so that the account can be closed and a statement rendered.

Some bookkeepers transfer all the balances on the ledger the same day the last posting is made for that day. This is a tremendous task and will probably keep the bookkeeper busy until the "wee hours" of the morning, but it is no doubt the most satisfactory way when completed. Just before transferring the balances to the new ledger it is necessary when this method is pursued to first take off a trial balance of the old ledger. If the trial balance does not come out right every effort is made to find the discrepancy. The balances are very carefully checked over from the ledger at least once, to see that they have been properly copied.

It is not absolutely essential, however, that the trial balance of the old ledger comes out right before the balances are transferred to the new ledger. In fact, in order to accomplish the task within the allotted time it is necessary to begin transferring the accounts as soon as the trial balance is taken off and checked up. As soon as all the accounts are transferred a trial balance is then taken off of the new ledger. If the trial balance of the old ledger does not agree with the trial balance of the new ledger it is, of course, evidence that the balances have not all been transferred correctly. The quickest way then of finding the error is to check up the trial balances with each other. As soon as the two trial balances are made to agree it is ample proof that the balances have been correctly transferred from the old ledger to the new. This much accomplished, the bookkeep-

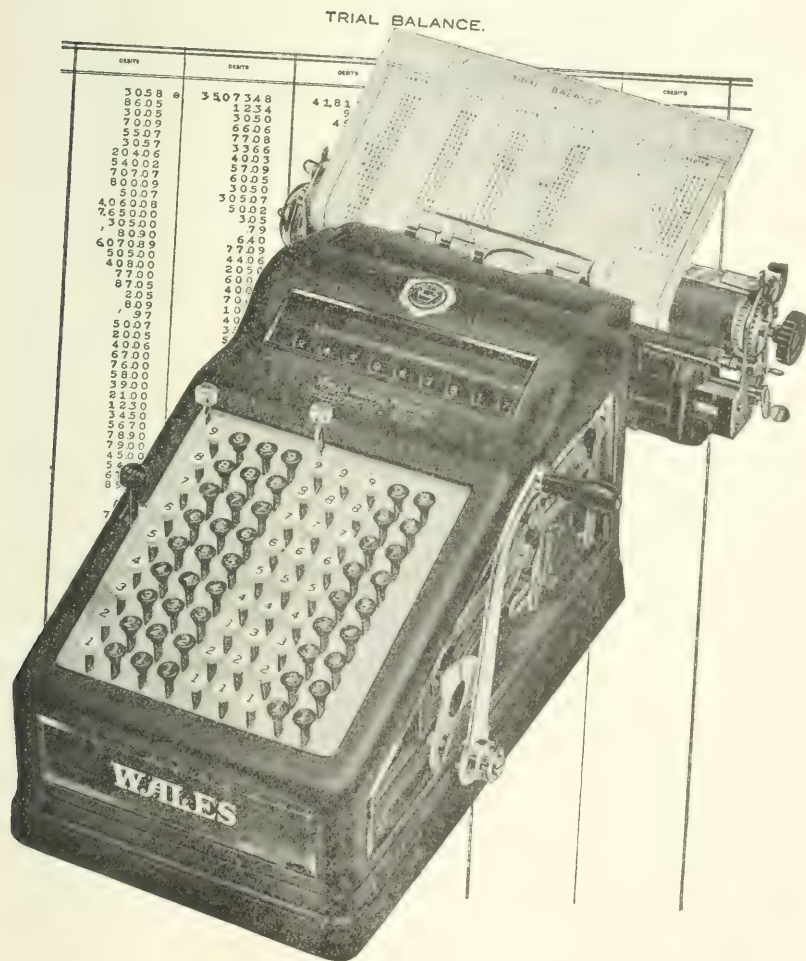
Copyright 1889, by DENNISON & BROWN, New York. Ex. T. B. St. 140.

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TRIAL BALANCE BOOK

er may then search for the difference which may exist between the trial balances and the balance as shown by the general ledger.

Some bookkeepers do not take a trial balance off of the old ledger before transferring the balances to the new ledger. They simply transfer the balances to the new ledger and take off a trial balance of that ledger only. The defect of this method, however, is apparent. By this method the only way the bookkeeper has of proving that he has forwarded



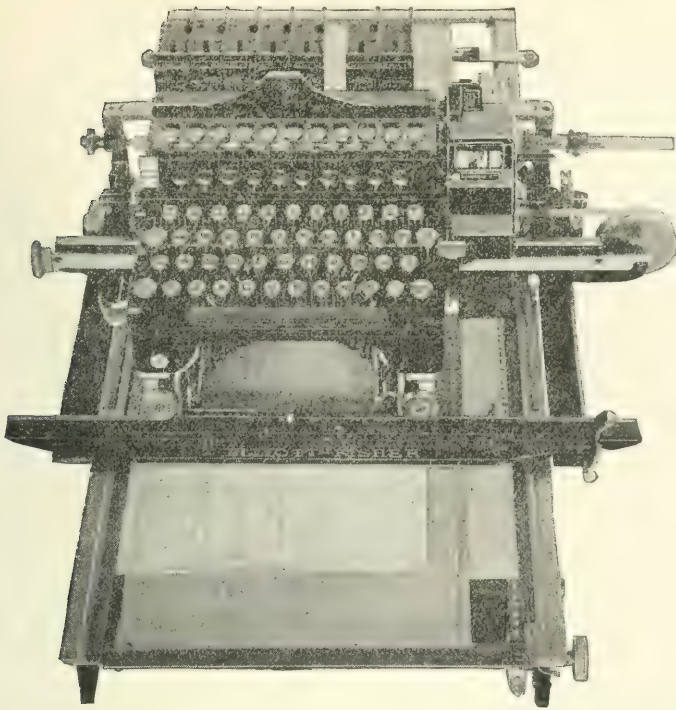
ADDING MACHINE SHOWING TRIAL BALANCE WORK
(Courtesy of the Adder Machine Co., Wilkesbarre, Pa.)

all the balances correctly is by checking up the trial balance of the new ledger, or the new ledger itself, with the balances on the old ledger. This is not only a more arduous task, but takes longer, and even when the process is completed is not conclusive proof.

One bookkeeper has a rather unusual method of transferring accounts from the old ledger to the new. He transfers them in sections. That is, one day he will transfer the balances under a certain number of the letters of the alphabet. He takes, say, the balances under A, B, C, and D, the first day, those under E, F, G, and H, the second day, and so on, until all are forwarded. Each section transferred to the new ledger is proven with the corresponding section of the old ledger. As each section is forwarded, no more items are posted to that section on the old ledger. The posting is done to the accounts that have been transferred to the new ledger, while the posting is still done to the accounts in the old ledger that have not been transferred. Under this method the posting is done in two separate ledgers until all the accounts are forwarded. There is a great deal of risk about this, owing to the danger of getting the ledgers confused. For this reason most bookkeepers would not approve of such a method.

There is another method by which only part of the balances are transferred each day, but from the first day any of the balances are transferred the posting is done from that date in the new ledger. For instance, the balances under A, B, C, and D only are transferred. Deposits and checks, however, are posted to the accounts under the remaining letters of the alphabet, just as if the balances had been forwarded from the old ledger. Of course, for the time being the postings cannot be added or deducted from the previous balances, which have not as yet been transferred, and carried to the balance column. As soon as these balances are forwarded, however, the accumulated credits and debits are added or deducted separately from the balance and each balance is forwarded to the balance column. As soon as all the balances are transferred the trial balance must agree with the old ledger.⁹

⁹Edgar G. Alcorn in *The Bankers Magazine*.



BANK BOOKKEEPING MACHINE—LISTS DEPOSITS AND MAKES ITS OWN ADDITIONS AND SUBTRACTIONS—ITS OPERATION IS AS FOLLOWS:

The sheets that are shown on the flat platen of this machine are the monthly statement of account on top, the ledger page between the two carbon strips, and the proof sheet, or auditor's journal page at the bottom. The machine can be operated on just the ledger page, or the ledger page and auditor's proof sheet without the statement, if so desired. The registers at the top of the picture accumulate totals and the crossfooter at the right figures each account as the postings are made.

The operation is as follows: The old or last balance is typed into the first column, and as it is typed, without any other operation, it is picked up or accumulated in the cross-footer at the right. The next four columns are checks paid, and as these are typed they are added in the registers at the top of the machine and are automatically subtracted in the crossfooter from the old or last balance. The next column is for deposits, and as the deposit is typed it adds in the

register at the top of the machine, and also, without further operation, adds in the crossfooter.

The crossfooter now shows the depositor's new balance, and the new balance is then typed in the last column, and as it is typed it subtracts in the crossfooter and the crossfooter clears. The fact that the crossfooter clears proves that the entry has been accurately made, or else figures would remain in the crossfooter. The checks paid accumulate in the registers at the top and the deposits accumulate and show at the end of the day a total of all checks paid and a total of deposits.

One of the most valuable features of this machine is the auditor's journal, or proof sheet. All transactions of the day that are entered on the machine are entered on the proof sheet so that the cashier or whoever is responsible for the control of accounts has the complete detail before him, which shows the name of the bookkeeper that makes the entry, and name of each individual depositor whose account has been affected and shows his last and his new balance.

This picture shows operation on loose leaf ledgers, but the machine is also constructed for holding an entire ledger, so that each account may be posted without taking the leaves out of the ledger.¹⁰

BALANCING PASS-BOOKS

In the balancing of the depositor's pass-book the bank comes into close personal touch with its depositors, and should not regard this as a necessary evil, for it should be a very essential detail. Entries should not be made carelessly, as if it did not matter, for the book is the depositor's receipt for his deposit, and is important both to him and the bank. A slovenly kept book will indicate that the bank is careless, which it cannot afford to be. However ill the depositor may treat the book, the bank should use care.

Some depositors do not want a statement rendered, but want their book balanced, and vouchers listed in the book; and if so, it pays to accommodate them—they may have a reason; and a bank must live by its depositors. The old

¹⁰By courtesy of the Elliott-Fisher Co., Harrisburg, Pa.

Irishwoman had it right when she said: "It's the likes o' me that keeps the likes o' you on your job."

This balancing should not be done by the bookkeeper, nor from the ledgers, and deposits not entered by the teller should be entered from the slips. Some banks are, of course, so small that balancing must be done by the bookkeepers, or some clerk who is general utility man.

When the account is overdrawn the account cannot, of course, be balanced and the vouchers should not be returned until the overdraft has been made good. The vouchers are the bank's evidence of payments and should not be returned until the matter is adjusted.

Books should be balanced frequently, and if not sent in should be called for and not allowed to run long without balancing. This should be insisted upon. Country banks are more lenient than city, as their methods are not so rigid and their help often insufficient to do all things as per schedule.

In the statement settlements, some banks do not render the statement without the book, making the balance therein, while others ignore the book and render statements monthly. Checks are now usually run off on the adding machine unless for some reason they are to be listed in the book in ink. Deposits without the book are a nuisance, and inasmuch as the entry must be made from the ticket, which has been filed away, such practices are not to be encouraged. Duplicate deposit tickets are sometimes issued as a receipt, to be entered in the book when presented. Moreover, when the book is left for balancing, the entries cannot be made while the book is in the bank's possession and for this reason the statement system is the better way.

THE STATIONERY AND SUPPLIES

Buying stationery is like buying a woman's garment—you can pay as much as you like, and must be a judge of quality or you pay too much. The waste in supplies is enormous. Buying is often done without regard to the utility of the article, or the needs of the business. Scratch pads are often made of finely engraved linen letter heads which could have been cut down and used for better purposes.

Pencils, pens, erasers and stationery in general are wasted for lack of system.

A bank of all institutions should not be small, and should buy for quality as well as for cost; but it can be saving. Ink should be bought in quantities and kept in good, non-evaporating ink wells. Pens should be purchased in great gross lots and doled out as needed. Books should be ordered in time to allow for proper "seasoning" or they will come in "green" and, therefore, warp, and prove unsatisfactory. Where there is likelihood of frequent change of officers, letter heads should not be bought in large quantities, for a change makes the old valueless.

Check-books and pass-books constitute a very large item of the stationery expense and should be bought in quantities after competitive bidding on the same paper and for the same amount. So close does this competition at times become, that it is reported that a firm lost money on a bid of a million checks where it neglected to estimate the cost of the string and delivery charges, the checks going to different branches at different times during the year.

Stationery is best kept in a stock room arranged in the form of a card cabinet with compartments of various sizes, labeled or numbered. The forms should be indexed as to number and particularly as to title. The printer should number the form as, for instance, "55-1,000 6/9/14," indicating that the order was placed on June 9, 1914, for 1,000 and is number 55 in the index of forms. The cost can be indicated in the index of this form. When the order has been placed and delivered and the receipt of goods checked by the clerk in charge, the bill is referred to the proper officer for payment.

The stock is checked over occasionally and when the supply of any article is running low, a new order placed. No form should be ordered without going over carefully to see if it cannot be improved. Few forms are perfect. One large bank in New York keeps account with each form, accounting for all received by a careful system of audits.

One bank keeps its records of stationery and supplies by a regular double entry system of bookkeeping. When a new order of envelopes is received, the "envelopes" account is debited with, say, 25,000 and a general account credited with the same amount and the cost put opposite the entry

in this account. When some department needs envelopes a requisition is made on the stationery department, and the amount charged to the account of that department, and credited to the envelope account. Charges are made to the accounts of the various departments which use the envelopes to ascertain the cost of operation. Thus, a balance sheet can be taken off proving the exact amount in the supply man's hands. Moreover such procedure shows exactly how much stationery has gone to each department and its cost. The time involved in keeping such a system makes it more expensive than the amount saved would warrant, except in the case of very large banks where some exact system is absolutely necessary. In a smaller bank a careful watch for wastefulness and a reasonable investigation of requests for supplies will serve the purpose.

The chief clerk often has the care of the records of the bank, by which is meant books, letters, tickets, etc., which have ceased to be used by the various departments, and have become the past records of the bank. In many growing banks, and where consolidations have taken place, this is a serious matter. One man should see that everything is properly labeled, dated and stored away where it can always be found quickly. The deposit tickets, exchange slips, letters of the correspondence department, etc., should be kept about six years. All books should be retained for about the same period, except the ledgers which should be retained as long as possible. It is advantageous to keep records and items which are likely to be called for at frequent intervals, in such shape for a year or more back, that they can be gotten at quickly. Unless a very complete system of storing all these records or vouchers is devised and very carefully followed up by some one in authority, they are bound to get into a chaotic condition.

THE BANK'S EXPENSES

In paying the bank's expenses, no better form could be devised than the voucher check, which classifies the charge for entry to expense account. After the invoice has been properly verified and payment authorized, the amount is entered on a voucher record with the name, amount, date and purpose, and classification, and voucher check issued.

When this comes back it is charged to expense account under its regular heading as indicated on the voucher. The unpaid vouchers would indicate the amount of unpaid bills. Or, if desired, the entry could be made against expense account as soon as the check was issued, which would be preferable. Some banks pay by cashier's check, cash over the counter, and take simply the receipted invoice as voucher. But a uniform record is much to be desired, and the original invoice can be attached to the voucher check after it has been paid.

Some banks make the expense items a matter of record on the minutes, which would seem a waste of time and effort, a proper audit by a committee being all that is necessary. But having done so in the past they must always continue to do so.

PETTY CASH

There are many petty items that must be paid for and for which no voucher can be had, such as car fare, stamps, etc., and these should have tickets properly initialed; but petty cash can best be kept by the "imprest system." Some banks keep these petty items and hold them as cash for a time and charge them up. The imprest method is better. In this system, the teller is charged with an amount sufficient to cover a month's petty expenses, and this charge stands against him, the cash being segregated from his counter money. As he pays bills, his petty cash runs down, until it becomes necessary to replenish the petty cash, when he renders account of the items paid. Check is drawn to cover, or cash taken out of regular cash, which restores the account to its original amount. This is recommended by experienced accountants as the proper way. A petty cash-book may have columns to provide for classifying the payments as expense account classifies the larger payments.

Expense account should be run on the columnar idea, with a column for each class of expense, such as light, heat, stationery, incidentals, etc., so that the aggregate of the expense items may be known, and if desired compared from year to year to ascertain the relative cost of management and expenses.

CHANGES IN ACCOUNTS

For the information of the officers, changes in accounts are noted from day to day, particularly those that have been closed. The reason is ascertained, if possible, so that any error or misunderstanding may be corrected. It costs considerable to secure an account, and it should not be lost to the bank without good reason. Accounts opened and closed are reported to the officers daily, with details concerning balances, etc., for their guidance.

ACCOUNT CLOSED		New Business ☒ Check Desk ☒ Cash Item Dept. ☒ Correspondence Dept. ☒ Remittance Dept. ☒
Name..	John B. Masters	
Address	1093 6 th Ave	
Date closed	Oct. 23	Balance withdrawn Oct. 31
Reason for Closing	Has gone out of business	
Remarks:	None	

FILE IN CREDIT BUREAU

MEMO. OF ACCOUNT CLOSED, FOR INFORMATION OF CREDIT DEPARTMENT

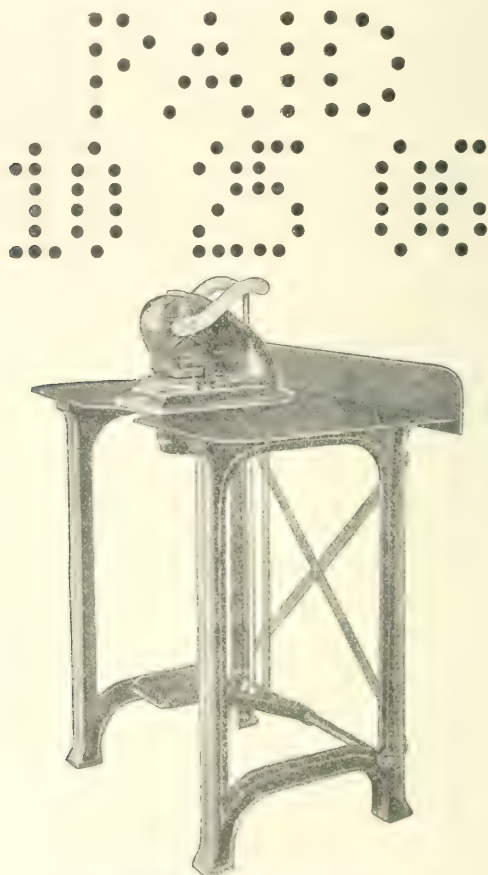
In the competition for accounts, some banks make note of checks going through their hands and thus obtain a list of the depositors of other banks. This gives the executive force definite information to work upon in securing new business. And as soon as a liquidation or an absorption is rumored, the competitor banks bestir themselves to obtain the accounts of the bank going out of business and this is the clue upon which they work.

CARE OF CHECKS AND DEPOSIT TICKETS

Until the vouchers are returned and the account reconciled, the checks paid by the bank are important documents and are given careful attention. They are filed in check files, under the name of the depositor, as they are paid and

not according to their date. The pass-books are written up from these vouchers and in the statement system they are used independently of the ledger records. Checks are cancelled by mutilating as soon as they are paid.

Deposit tickets are filed according to date and the subdivision of the ledgers. They are, of course, not returned



CHECK CANCELLING MACHINE AND ITS WORK
(Courtesy of B. F. Cummins Co., Chicago, Ill.)

to the depositor, being kept for a certain length of time and then destroyed. Some banks keep them indefinitely. One large New York bank keeps the letters which come from depositors, and are used as deposit tickets, for a certain length of time after the account has been reconciled, and this is given careful attention. After reconciliation the letters are destroyed after a stated time.

CHAPTER XI.

CHECKS AND THEIR COLLECTION

Through the disappearance of sectional lines and the knitting of the country together by the railroads, has come the growth of commerce, so that no section is now sufficient unto itself. The apples of Oregon are sold in New York; the fruit of California in Boston; and the shoes of Massachusetts in Texas.

Trading is no longer confined to a neighborhood. Commercial transactions are largely between the principal cities, and between smaller places and the principal cities. For instance, the trade between New York and St. Louis is large, and between St. Louis and the surrounding towns likewise large, every large city acting as a distributing center for the adjacent territory. Banking in turn follows the course of trade. The suburban merchant remits to his jobber in the territorial distributing point, and he in turn to the house in the large city. The check which settles the debt follows or should follow approximately the same route as the trade, both in paying the debt and in the collection of the check itself, it being the function of banking to settle the debts trade creates.

Domestic trade exchanges do not balance any more than foreign exchanges. The farming sections produce more than they consume. The crops in some sections are large, while in others small. Manufactured goods are exchanged for raw material and foodstuffs, section to section, but there is always a balance which has to be paid in cash. When the crops are being marketed, funds due Western banks pile up in the New York banks. But when the farmers need funds for planting and harvesting, these debts must be paid in money. The home bank gives the farmer credit for his wheat draft and itself gets credit in New York. By common consent New York funds the country over are the basis of domestic exchange, for the reason that New York funds are desired everywhere, and generally are worth par or better. New York being our chief commercial city, the demands of business make it necessary that most banks have

a New York balance, and by virtue of this desire and even necessity of maintaining a New York account, New York has become the banking center of the country.

Wherever commerce goes banking facilities must follow as a necessity, and the greater the trade, the greater the need for banking accommodations. The merchant in Texas who buys a lot of shoes from a Massachusetts manufacturer pays by drawing his check on his local bank and sending to the seller, who must turn the check into money as soon as possible. The buyer might, but it is not likely that he will, purchase a New York or Boston draft (domestic exchange) from his local bank and forward this in payment; he is more apt to send his own check, for two reasons: First, because it is the simplest and easiest way and costs him nothing in time or money; and secondly, because until the check comes home for payment he will have the use of the amount represented thereby, it may be with interest.

CHECKS CIRCULATING CURRENCY

The check thus sent may be out for ten days or two weeks, passing from hand to hand; from bank to bank; settling debt after debt; providing reserve balances for various banks, and circulating to all intents and purposes as money, and answering the functions of money admirably, so long as conditions are normal.

A check, however, is not money, and even though it may answer the purposes of money, must finally be redeemed in money, and back of it, therefore, must be a proportionate amount of money or suspension of payment results.

Banking functions, particularly in connection with bank checks, are becoming better understood as the rank and file of the people become better versed in the ways of business. The use of the bank check is coming to be common; its utility as a voucher, its convenience as a mode of payment, and its safety and cheapness as a form of remittance more fully appreciated as banking has expanded and new banks have been created.

GROWTH OF THE USE OF BANK CHECKS

The use of bank checks has grown enormously of late years. With the multiplication of banks, so that every town

and hamlet has its local institution, encouraging people to open checking accounts, the use of the bank check has become almost as common as the use of paper money. With the growing use of checks as a form of circulating currency has come the development of the transit department, so that everywhere are to be found banks featuring their collection service. One large bank in Philadelphia has handled over a billion dollars in its transit department in the course of a single year.

It is estimated that twenty years ago the amount outstanding in the form of collections was \$25,000,000, representing 3,800 banks. In 1902 4,600 banks had \$50,000,000 outstanding; while recent figures indicate that no less than \$144,000,000 is in process of collection constantly.

DEFECTS IN THE PRESENT SYSTEM

But in spite of the widespread use of checks and their many advantages as a circulating medium (checks being the almost perfect medium of the large and distant payments, as bank notes are the perfect medium of the small and local payments), they must be redeemed in money; they must be paid on demand. This demand often takes on a silent form through the clearing-house, and a "clearing-house run" may take place, as disastrous as a run over the counter. The bank must either redeem its checks in money or suspend.

The trouble with the American currency system has been that heretofore there has been no way by which a bank could turn its assets into a circulating medium, to redeem the checks of its depositors when the usual reserve proved inadequate. The banking system that does not permit the resources of the bank to be turned into circulating credits to redeem check obligations is vitally defective. The deposits being payable on demand, and this demand taking the form of bank checks, it becomes necessary either to carry large reserves or to have some way by which these demands can be satisfied by the issue of an instrument that will freely circulate when the bank check proves inadequate. In other words, checks must be redeemed in bank notes, created by turning commercial paper into bank notes; for checks being of non-uniform denomination and unknown outside their immediate circle can only pass as currency

where well known and under normal conditions. The Federal Reserve System will make this possible by its rediscount operations.

CHECKS DEFINED

A check is best defined as "a bill of exchange drawn on a bank and payable on demand." And as a bill of exchange it is subject to all the laws governing bills of exchange. Commentators on the laws of negotiable instruments usually give but little space to checks, treating them under the general classification of bills of exchange; although there are peculiarities surrounding checks that do not attend ordinary bills of exchange, and the law of bank checks is a study in itself.

Like bills of exchange, checks are regarded as "Inland" and "Foreign," depending upon whether they are payable within the State or without. But for practical banking purposes a check payable outside the jurisdiction of the local clearing-house, or outside the city if such institution does not exist, is regarded as "foreign"—meaning the mails and the transit department must be used to make the collection.

BANK CHECKS CLASSIFIED

Bank checks may be grouped into four classes: (a) Checks drawn on the bank in which they are deposited and which come in over the counter for deposit or for cashing, the latter consisting largely of "counter checks" and payroll checks—"own checks"; (b) checks drawn on banks in the same city and which will be paid through the clearing-house; (c) checks drawn on banks in the same city which do not belong to the clearing-house, or clear through members, and which must be presented for payment by messengers. These are not numerous even in a large city like New York, most banks preferring to make use of the clearing-house, although such items are yet considerably in evidence; (d) foreign checks, consisting of checks drawn on other points and which must be collected through the mails. The latter class constitutes the "transit items," and the department handling these items is called the "Transit Department," and is to be distinguished from the "Collection Department" which attempts to collect time and other

items. The collection service must be regarded as a matter of banking courtesy and not a fundamental element in banking practice. The cost of running a well-conducted collection department must necessarily be large and the fees frequently all too small to recompense the bank; but it has become such a common practice to deposit all notes, drafts, certificates of deposit, coupons, etc., with the bank for collection and credit that it has come to be looked upon as a part of the bank's regular work to make such collections, frequently without charge, although some banks so operate their collection department that a profit accrues through collection fees. Some transit departments are run at an expected loss, this being recompensed through the profits on deposits attracted by transit facilities and low exchange rates.

COMPENSATING BALANCES

Checks are generally credited as cash, although in the better managed banks depositors are not allowed to draw against uncollected funds. This is provided against by requiring a balance large enough to cover the uncollected items. Thus, if a merchant should deposit \$5,000 daily and carry a balance of \$15,000, allowing three days for collection, his account could be drawn against in the sum of \$5,000 daily without drawing upon outstanding items; his checks of one day offsetting the collections of the same day.

Where checks are credited at par, it is generally required that a compensating balance be carried. By compensating balance is meant a reciprocal arrangement by which a depositor (bank or individual) agrees to keep a certain balance free of interest as compensation to the bank for the loss which will accrue on collections. Thus, a bank in the Middle West might agree to keep with its New York correspondent a balance of \$10,000 without interest; in return for which it would receive, say, \$25,000 of transit items a month for collection at an agreed rate, the New York bank, of course, paying the charges which it might or might not collect from its depositors. The profit to the Western bank lies in the exchange charges which it will deduct when remitting to its New York correspondent, which would probably be more than the interest on the \$10,000. Likewise if a bank in

Albany sends to Philadelphia items on which the Philadelphia bank loses, say, \$10 a month, but earns \$20 in interest on the balance of the Albany bank with it, it is a desirable connection. The analysis department must see that the balance is maintained as agreed.

THE COUNTRY BANKER AND HIS CITY CORRESPONDENT

The country banker uses his reserve agent both as reserve agent and as collecting agent, depositing his items both for credit and collection, the items so sent the reserve agent as soon as credited becoming part of his lawful reserve. In the Federal Reserve System the item becomes reserve as soon as it is mailed. As soon as the letter is dispatched the country banker, therefore, regards the amount as added to his balance, unless other arrangements are made. The reserves that are so constituted are not reserves, but simply items in course of collection. In the aggregate the total is enormous. It is much more satisfactory to the country banker to send all items to his reserve agent in bulk than to attempt collection himself. It is cheaper and involves much less labor.

The transition that has been taking place in the collection of checks is well illustrated by the experiences of a country bank in New York State. In the early nineties it acted as collecting agent for a number of New York banks, and daily received a large number of items on surrounding places, which it sent direct to the drawee banks, receiving payment either daily, weekly or semi-monthly, but remitting to the New York banks daily. In the course of time an aggressive campaign was waged by a bank in a reserve city for reserve accounts and by the volume of its business was enabled to quote most favorable terms. The result has been that the first mentioned bank no longer collects for the surrounding territory, but sends all its checks in one letter to the reserve city bank. The latter now gathers to itself practically every check for a hundred miles around, and has made a feature of its collection service and favorable terms.

To such a marked extent has this process been going on, that in Chicago one of the largest banks employing from 600 to 700 men utilizes one-third of its force in its collection department.

There are certain cities which have specialized in collections and have become transit centers. Large and progressive banks in these cities have well organized transit departments, and by the breadth of scope and efficiency of service, and cheapness, have made their collections a feature. Albany, N. Y., is one; Chicago is another; Boston has become the center of New England collections; Philadelphia has taken a prominent place as a transit center by virtue of its liberal collection arrangements; Kansas City, by reason of its efficient clearing-house, has taken front rank as a collection center for a large territory; Baltimore and New Orleans are likewise important points.

THE JOURNEY OF A BANK CHECK

Inasmuch as a check is not money but merely an order to pay money, it should be sent home for redemption in money by the shortest route and in the quickest time. Its quick redemption is the chief concern, and because of its short life it is, under ordinary conditions, an ideal currency. It expands and contracts as the needs of business require. If business is slack, the number of checks will be materially less, and likewise the volume.

As a matter of fairness and good business policy, the banker is under obligation to reduce checks received from his depositors to available funds just as quickly as possible. Under the present system of collecting these items, bankers often resort to circuitous routing to evade high collection charges. Mr. Cannon in his work on clearing-houses gives this example: A check on Sag Harbor, N. Y., deposited in Hoboken, N. J., went from Hoboken to New York, New York to Boston, Boston to Tonawanda, Tonawanda to Albany, Albany to Port Jefferson, Port Jefferson to Far Rockaway, Far Rockaway to New York again, New York to Riverhead, Riverhead to Brooklyn, and finally from Brooklyn to Sag Harbor. Had it gone direct, it would have saved fifteen hundred miles in travel and the handling by nine different banks.

Any indirect routing of checks to save exchange charges takes them out of their natural channel—sends them home by the longest route to avoid the cost of the ticket by the shortest way. A large department store in New York does

its banking in Philadelphia. This might be due to several reasons, either a desire on the part of the merchant to build up the business of his own bank, or to save the cost of exchange, which in New York he would have to pay and which in Philadelphia he may escape by reason of the clearing-house rules regarding collections.

THE TRANSIT DEPARTMENT

The transit department is a department of labor. The mill grinds continually. Every day is a busy day, as was the day before. It is a good barometer. When business is brisk, the transit items will be heavy; when slack, the work will be lighter. The stationery, postage, clerk hire, etc., annually amount to a goodly sum, and the problem is to make the department show a profit by charging for the service more than the service costs. This is the problem of exchange. Some banks work on the theory that they can afford to collect all checks gratis, provided a balance free of interest is carried large enough to provide a profit. Others, by clearing-house rules, must charge set fees.

The total of the items sent out each night (nothing is held over) is charged to "transit account" in the general ledger (the individual banks having been charged with the various amounts) and when returns are received they are credited. The bank knows, therefore, how much is outstanding all the time in the mails.

An exchange account is also opened, to which the exchange it receives is credited and to which is charged the exchange paid for collections. This measures the profit or loss of the transit department, as this is the only source of profit the transit department can show. There is, of course, the profit indirectly earned through the ability of the bank to make cheap collections and, therefore, attract large reciprocal accounts.

The term "transit item" is used to designate those items which are sent by banks to other banks for collection and credit, or collection and remittance, and which have been received as cash by the bank, as distinguished from the items received for collection which are not entered as cash and will not be until returns are received.

They may also be known as "foreign items" as distin-

guished from "city items." But whatever the term, the proposition is the same; that is, to turn the item into money or its acceptable substitute, a draft on the nearest reserve city, as soon as possible. In order to do this, banks have correspondents in all parts of the country, which collect items in a certain territory, and maintain reciprocal arrangements with each other. If the bank has no correspondent it selects one for the purpose. But large banks cover the country so generally with correspondents that it is not usual to have an item that cannot be collected quickly through the regular channel, unless there be some special need for hurry. This, of course, necessitates indirect routing and, therefore, delay, and the problem of banking to-day is to get these items collected in the shortest time at the least expense.

In building up a transit system, the bank makes an agreement with its correspondent to do this collecting for a stated rate of exchange charge, remitting as may be agreed upon; or there may be a mutual agreement, that in return for a balance maintained with it, the depository bank will send all items in a certain territory at an agreed rate of exchange as aforesaid. It is a case of one serving the other. We are now more concerned with the machinery than the terms of collection, but the test of a good transit man is his ability to make satisfactory connections that will result in profitable business in the transit department. In order to know where an item should go, should there be any doubt, there is kept a card record of correspondents, terms, average balance, etc., for use in routing checks.

A bank with wide connections will, therefore, receive a large number of transit items for collection in its territory. Thus a bank in Albany might collect checks for all New York State, on agreement with a bank in San Francisco. And all the New York State items of the San Francisco bank would go to the Albany bank and from there be sent out to its correspondents all over New York State. If it had no correspondent in, let us say, Watertown, it would send the item to Syracuse or Oswego, the nearest point where it had a correspondent. It is obvious that the transit man must know the map.

The Albany bank would credit the amount received and allow its San Francisco correspondent to check on it, or

remit to New York for credit of the San Francisco bank, the most likely course. Conversely, the Albany bank would send all its California items to the San Francisco bank for collection and remittance, and would receive in return the San Francisco bank's draft on New York. Payment in both cases would be made through New York (in New York funds).

COLLECTION OF BANK CHECKS

Transit items may be collected in two ways: Direct, using correspondent banks as collecting agencies; or through the medium of the clearing-house. The clearing-house system of collection contemplates dividing the country into zones, each zone to have as its focal point the reserve city of that zone. To collect an item, a bank would send it to the correspondent nearest the clearing-house in the reserve city that acted as the zone center for that district. The only additional machinery needed is the machinery in the clearing-house at the zone center. This system is best illustrated by a brief description of several clearing-house systems of clearing checks.

The Boston Clearing-House collects checks on all New England points. The scheme adopted in 1899-1900 was that of a clearing-house foreign department—a country clearing-house—which should clear New England checks. Each bank, instead of mailing individual letters daily to its suburban correspondents, “lumps” its country checks and sends them to the clearing-house, where they are re-sorted and sent by the clearing-house to the banks on which they are drawn. Settlement is made through the regular clearing-house in two days, the time required for collection.¹

As to the practical results of the Boston system, Charles A. Ruggles, manager of the Boston Clearing-House, states: “The introduction of what we term our foreign department, for the collection of checks in New England, has worked a revolution in the transit department. It has reduced the cost of collection to seven cents per thousand dollars: ninety-five per cent. of the collections are received within forty-eight hours. The system is entirely satisfactory as far as we can learn to both the city and the country banks.”

¹See Clearing House Chapter for more detailed description of the Boston Clearing Plan.

The Atlanta system of collecting transit items through the clearing-house was established in May, 1909, and is collecting transit items on Georgia, Florida and Alabama. Mr. J. G. Lester, manager of the transit department of the Atlanta Clearing-House, says: "We have found that the plan works admirably. I have found that it paid on three grounds; first, in clerical expenses; second, in postage and stationery; and third, by reason of consolidated business we get a cheaper rate of exchange. Then, too, our transit department having nothing else to look after, gets more prompt returns and more satisfactory service."

The Kansas City system of collecting through the clearing-house was installed during 1905, and collects from territory covering 682,810 square miles, which comprises this large middle Western section, including seven States—Colorado, Kansas, Missouri, New Mexico, Oklahoma, Texas and southern Nebraska. This clearing-house covers three and one-half times as much territory as the States of Pennsylvania, New York, Ohio and Illinois, combined, and has 5,600 banks in its district. As to the practical results attained by the Kansas City Clearing-House, Mr. Jerome Thralls, manager of the Kansas City Clearing-House, says: "The operation of our country clearing-house has reduced the cost of handling cash items in the territory covered by that department, over sixty per cent. The average time required for returns has been reduced in parts of that territory, over fifty per cent., and in the whole territory a reduction of probably twenty-five per cent. We know from our own experience that the plan is a good one and will work satisfactorily in any city where there is sufficient volume of country business to justify the establishment of such a department."

The Kansas City Country Clearing-House does not interfere with the arrangements of the individual banks, where these are more profitable—it merely offers its members the additional facilities which it affords. As it charges a uniform exchange rate of one-tenth of one per cent., which had previously averaged twenty-five to thirty cents per \$100, it follows that there are few cases where it does not pay to make use of the clearing-house. Its operating expenses are pro-rated monthly on the basis of the amount of business transacted by each bank.

In New England country merchants who used to allow from two to six days for the return of their checks must now be prepared to meet them in forty-eight hours. Similar results have been obtained in Atlanta and other places. Any system that will so quickly reduce a deposit to available funds is of inestimable value, not only to the depositor, but to our banking system in general.

EXCHANGE CHARGES

It was only about twenty years ago that the custom among banks was to receive checks and other items for collection only, crediting the proceeds when collected. The strife for reserve accounts led the city banks to accept and credit these items at par. The check had not yet received its growth as a national currency, the collection charges were not a burden, and the number of items relatively small. The city bank then began paying exchange to the country bank, and collected the whole country at par. The country bank, therefore, did not pay exchange, but received it. So great did the problem become that clearing-houses took the matter up and passed stringent rules regarding collection of checks, placing a minimum rate on certain points, with discretionary charges on others, the result of which was to shift the burden to the last holder of the check.

The growth of banks in number has brought about the growing use of country checks, so that they now pass through the banks by the hundred thousand. The volume of business in this country is upwards of four hundred and fifty thousand million dollars yearly, and by the rule that fully ninety per cent. of the business is done by check, it will be seen that these instruments play a vital part in the commercial transactions of the country.

The ideal arrangement would be to have all checks circulate at par. But the country banker has become so wedded to his exchange profits (in some banks enough to pay part of the salaries and sometimes the dividends) that he steadily opposes any change that will deprive him of these profits, or any part of them, which are easily made and sure. To avoid the collection charge, indirect routing is resorted to, and instead of a check going by the shortest route it often goes by the longest, as has been illustrated.

Theoretically, the charge made by the country banker should only be sufficient to cover the expense of creating and maintaining a credit balance in the reserve city on which he draws. This expense would, in reality, never exceed the cost of shipping currency to that city. Now the city banker pays the charge of the country banker, which charge to-day includes not only the cost of maintaining the balance in the reserve city, but a profit to the country banker as well. But to the country banker in most cases the cost of maintaining a credit balance in his reserve city is nothing, for his reserve bank in that city often not only collects the world for him at par, but also pays him interest on his balance. Thus we have the fallacy of the city banker paying the country banker for the exchange the city banker provides the country banker without cost. The city banker has the right to adopt any system that will relieve him of this injustice provided he does not merely shift the burden to another.²

Everybody tries to avoid the exchange charge. The merchant in the small town pays his bills by his check. The merchant in the larger place accepts it rather than lose a customer or invite controversy. The merchant in the smaller town could get a New York draft, but that would involve expense. The city dealer endeavors to shift the burden on the bank, and some banks stand it and even invite it. The city bank then tries to shift the burden by transit arrangements, and accepts the loss only in the hope that it may indirectly regain it. Thus items frequently pass through the place of payment two or three times because of this dodging of expense.

The solution would seem to be through the clearing-house, for if it will operate in Kansas City, it will operate on a larger scale for the whole country. Clearing-house collection reduces the cost from one-half to two-thirds. This has been demonstrated. It does not deprive the country bank of its profits, and will work a saving in postage, labor and time to compensate for the loss by reason of cheaper rates. It is just and reasonable. The contrast between individual collection and clearing-house collection is apparent.

²A. E. Eyler, Union National Bank of Pittsburgh, in Pittsburgh-Cincinnati Debate of American Institute of Banking.

Under the present system each day the country banker receives a letter containing checks on him from each of fifteen or twenty banks in a city. In remitting for these items he sends a draft to each bank that sent him a package of checks. Each remittance costs him a two-cent stamp, an envelope, a letter head, a draft, and his clerk's time in handling the transaction. This is a fixed cost irrespective of the size of the remittance, so the charge on even the smallest remittance he makes must be at least sufficient to cover this cost. Under the clearing-house system the country banker will receive each day, from the clearing-house in the city, one letter, containing all the items drawn on his bank. In remitting for these he will use one letter head, one draft, one envelope, and one stamp, instead of from fifteen to twenty of each, as at present. The saving in these items and in clerk hire will certainly be to the advantage of the country banker and, in all fairness, he should reduce his charges for making remittances.

It will inflict no injustice on the country banker as the only reduction in his charges will be proportionate to the reduction in his expenses for making remittances. He ought to make this reduction, for any bank is in honor bound to serve its customers at a rate consistent with justice and fair dealing. A bank is an agent of society to add to its welfare; not to hinder it. Any bank that must maintain itself by exorbitant charges for its services has no warrant for its existence.

The problem of the collection charge is not only to reduce it, but to place it where it belongs. As now obtains, the charge falls upon the last holder, who cannot escape paying the tax. The drawee bank most assuredly deducts the exchange charges from its remittance, and it is easier to place the burden upon the man who deposits the item in a bank than to collect from the drawer. The proper place for the levy of the tax would, therefore, seem to be from the man most accommodated, namely the drawer. His banking privileges are worth something to him. The benefits of a bank account are not only worth the loss of interest, but the checking privilege is worth a small charge. But by common consent the tax has been imposed upon the last holder, leaving it to him to make the adjustment in his prices, or taking the loss as an expense incident to doing business.

It is anticipated and hoped for in many quarters that eventually the Federal Reserve Banks will take over a large part of the collection of transit items for the whole country on a basis fair to all the interests involved. The Federal Reserve Act empowers the Federal Banks to "receive on deposit at par from member banks or from Federal Reserve Banks checks and drafts drawn upon any of its depositors, and when remitted by a Federal Reserve Bank, checks and drafts drawn by any depositor in any other Federal Reserve Bank or member bank upon funds to the credit of said depositor in said reserve bank or member bank. Nothing herein contained shall be construed as prohibiting a member bank from charging its actual expense incurred in collecting and remitting funds, or for exchange sold to its patrons. The Federal Reserve Board shall, by rule, fix the charges to be collected by the member banks from its patrons whose checks are cleared through the Federal Reserve Bank and the charge which may be imposed for the service of clearing or collection rendered by the Federal Reserve Bank. The Federal Reserve Board shall make and promulgate from time to time regulations governing the transfer of funds and charges therefor among Federal Reserve Banks and their branches, and may at its discretion exercise the functions of a clearing-house for such Federal Reserve Banks, or may designate a Federal Reserve Bank to exercise such functions, and may also require each such bank to exercise the functions of a clearing-house for its member banks."

It will thus be seen that the intent is not to collect at par; but at the cost of collecting, and this is as it should be. The costs of collecting a check cannot be avoided, and these incidental expenses should be borne by those most benefited; but what arrangements will be made in this respect cannot at this writing be stated. But the intent of the law being plain, and the necessity being acknowledged, no doubt the Federal Board will evolve a plan that will meet the approval of the country as well as the city banker.³

³At the time these pages go to press, the check clearing arrangements of the Federal Reserve Banks are being completed, and it is expected that before long the members of the Federal Reserve Banks will make the bulk of their clearings through this medium. It is yet too early to give any adequate description of the clearing process.

THE NUMERICAL TRANSIT SYSTEM

The greatest development that has attended transits and collections in recent years is the Numerical Transit System, which has been in operation for about three years. The plan simply designates places and banks by numbers instead of names. Thus, instead of referring to the National City Bank of New York, either in correspondence or in conversa-



TRANSIT ADDING MACHINE BUILT SPECIALLY FOR TRANSIT WORK, USING THE NUMERICAL TRANSIT SYSTEM

By courtesy Burrroughs Adding Machine Co., Detroit, Mich.

tion by name, the numerals "1-8" would be sufficient; meaning city No. 1, New York, and bank No. 8 in the clearing-house, which is the National City Bank. Thus, for every bank there is a number, and in listing checks the number which is on the face is all that is necessary to designate the city and the bank.

Banks have readily taken to the idea as a time saver, and it is fast replacing the use of names. The saving in

time can readily be seen when to indicate the "Continental and Commercial National Bank of Chicago," two numerals are all that is necessary. The system of numbering was carefully designed by a committee of transit men representing the American Bankers Association and is as follows:

Numbers from one to forty-nine, inclusive, are used to designate the reserve cities, each city being provided with a number of its own to be used as a prefix in numbering the banks in these cities. The clearing-house numbers in each of the cities are used to designate the clearing-house banks and additional numbers provided for banks which have no clearing-house numbers. Numbers from fifty to ninety-nine, inclusive, are used to designate States. The State numbers are used as a prefix for numbering banks which are located outside of the forty-nine cities already provided for. In numbering the reserve cities Brooklyn is included with New York City; Kansas City, Kans., with Kansas City, Mo., and South Omaha with Omaha. As there are fifty reserve cities this left two numbers not used. These numbers have been given Buffalo and Memphis. Buffalo was selected because it is the tenth city in population and by giving Buffalo a number of its own the clearing-house numbers can be used for Rochester, whose population is 218,000, the next largest city in the State. Memphis was selected owing to the scarcity of reserve cities in the South and on account of its importance as a collecting center and also to permit the use of clearing-house numbers for Nashville with a population of 110,000, the next largest city in the State and which is also an important collecting center.

The forty-nine cities have been numbered, according to population as shown by the census of 1910, so that the largest cities have the small numbers. This plan reduces the labor of registering items in the transit department to a minimum as a large proportion of items are drawn on these cities. For example, a certain New York bank may be designated 1-8, a Chicago bank 2-1, a Philadelphia bank 3-39. Thus every bank in the United States is assigned a distinctive number, the prefix denoting the geographical location and the second or affix number denoting the name of the bank. These numbers, read directly from the face of the check or endorsement stamp, are substituted for names and addresses in making transit or other records. The extent to

which the numbers may thus be used is a matter for each individual bank to determine for itself, in accordance with its accounting system. It is imperative, however, that all checks, drafts and endorsement stamps should show the numbers so that every bank that cares to do so can make

6-5
CLEVELAND NATIONAL BANK
CLEVELAND, O

To _____

We enclose the following CASH items:—

Instructions
Telegraphic payment of more than \$500.00 or over and over \$500.00 T N P
Do not enclose items of \$10.00 or less or items listed "No Pro"
PROTEST all items over \$10.00 unless otherwise instructed

CHECK NUMBER	DATE	AMOUNT	INSTRUCTIONS
60 196 56 694		1050	
3 40 56 694		2156	
60 196 56 703		150	
56 23 69		4775	T N P
56 23 69		15500	
56 23 69		100	
56 23 69		200	
56 23 69		1413	
56 23 69		1703	
56 23 69		900	
56 23 69		525	
56 23 69		217	
56 52 8 9		1908	
56 165 60 174		736	
8 15 60 703		200	
56 99 68		74574 *	
		74574	
46 601128		19246	
82 60 393		1243	B/LATT
82 60 960		1323	
50 60 400		160	
154 60 345		98	
20 69		3402	
213 60 278		600	
26 60 413		900	
89 60		2573	NO-PRO
89 69		725	
89 601060		1330	NO-PRO
38 60 189		3850	
9 69		5127	
9 69		3728	
24 69		1338	
24 60 488		3991	
1 60 628		594	
4 60 904		214	
24 601322		625	

136886 *

A TRANSIT LETTER MADE ON A BURROUGHS TRANSIT MACHINE
Courtesy Burroughs Adding Machine Co., Detroit, Mich.

use of this time and labor-saving system. It is obvious that every banker would wish to have his checks in such form that they may be conveniently handled by all other banks and it is expected that within a very short time every check in circulation will show the transit number of the paying bank.

By the use of individual numbers for the forty-nine cities the banks in forty-eight other cities can be designated by their clearing-house numbers. For instance, in New York State three cities have been given numbers of their own, namely, New York No. 1, Buffalo No. 10 and Albany No. 29. The next city in the State, according to population, is Rochester, which is the first city numbered with the State prefix, which is number fifty. The Rochester banks are numbered 50-1, 50-2, etc. The system, therefore, permits the use of clearing-house numbers to designate banks in ninety-seven of the principal cities of the country. The Treasurer and Assistant Treasurers of the United States and the postoffices in the reserve cities have been given numbers. Numbers have not been provided for express companies, railroads or mercantile firms. If the clearing-houses in any of the forty-nine numbered cities wish to have additional numbers supplied for express companies, railroads, etc., they can forward a list to the American Bankers Association and the numbers can be provided.

The State numbers have been divided into five sections as follows:

Eastern	50 to 58
South Eastern	60 to 69
Central	70 to 79
South Western	80 to 88
Western	90 to 99

The States containing the principal collecting centers, namely, New York, Pennsylvania, Illinois, Missouri and California, have been given the first numbers in their respective sections: 50-60-70-80-90, to facilitate the listing of items on the adding machine as only one key is used to print these numbers and also to indicate that the following nine numbers in each section represent the States in the same territory. Numbers 59 and 89 are left blank and can be used in the future should it become necessary to number the banks in our island possessions and Alaska. The system of numbering the States in groups according to territory should also prove to be of advantage in memorizing the State numbers. With the exception of five States representing each section the States are numbered in alphabetical order in each section.

The numbers of the different cities and States are as follows:

CITIES.	STATES.
1. New York City	50. New York
2. Chicago, Ill.	51. Connecticut
3. Philadelphia, Pa.	52. Maine
4. St. Louis, Mo.	53. Massachusetts
5. Boston, Mass.	54. New Hampshire
6. Cleveland, O.	55. New Jersey
7. Baltimore, Md.	56. Ohio
8. Pittsburgh, Pa.	57. Rhode Island
9. Detroit, Mich.	58. Vermont
10. Buffalo, N. Y.	59.
11. San Francisco, Cal.	60. Pennsylvania
12. Milwaukee, Wis.	61. Alabama
13. Cincinnati, O.	62. Delaware
14. New Orleans, La.	63. Florida
15. Washington, D. C.	64. Georgia
16. Los Angeles, Cal.	65. Maryland
17. Minneapolis, Minn.	66. N. Carolina
18. Kansas City, Mo.	67. S. Carolina
19. Seattle, Wash.	68. Virginia
20. Indianapolis, Ind.	69. W. Virginia
21. Louisville, Ky.	70. Illinois
22. St. Paul, Minn.	71. Indiana
23. Denver, Colo.	72. Iowa
24. Portland, Ore.	73. Kentucky
25. Columbus, O.	74. Michigan
26. Memphis, Tenn.	75. Minnesota
27. Omaha, Neb.	76. Nebraska
28. Spokane, Wash.	77. N. Dakota
29. Albany, N. Y.	78. S. Dakota
30. San Antonio, Tex.	79. Wisconsin
31. Salt Lake City, Utah.	80. Missouri
32. Dallas, Tex.	81. Arkansas
33. Des Moines, Ia.	82. Colorado
34. Tacoma, Wash.	83. Kansas
35. Houston, Tex.	84. Louisiana
36. St. Joseph, Mo.	85. Mississippi
37. Ft. Worth, Tex.	86. Oklahoma
38. Savannah, Ga.	87. Tennessee
39. Oklahoma City, Okla.	88. Texas
40. Wichita, Kans.	89.
41. Sioux City, Ia.	90. California
42. Pueblo, Colo.	91. Arizona
43. Lincoln, Neb.	92. Idaho
44. Topeka, Kans.	93. Montana
45. Dubuque, Ia.	94. Nevada
46. Galveston, Tex.	95. New Mexico
47. Cedar Rapids, Ia.	96. Oregon
48. Waco, Tex.	97. Utah
49. Muskogee, Okla.	98. Washington
	99. Wyoming

Numbers have been provided for all of the 2,200 banks in the forty-nine numbered cities and also in the forty-eight other cities showing the numbers for the first city in each State numbered with the State prefix. The remaining 25,000

banks of the country are to be numbered according to the following plan: The first numbers to be given to the banks in the largest cities and to be continued in the relative order of the population of the cities in each State. Each bank to be numbered in consecutive order according to seniority in each city. When there is only one bank in a town the banks are to be numbered in alphabetical order according to towns, the one bank towns to be numbered last. Blank numbers are to be left only in cities of 5,000 population and over.

Com Ger Tr & Sav Bk New Orleans 1679.50 No Pro Nat City N.Y.

Com Ger Tr & Sav Bk New Orleans 1679.50 No Pro Nat City . N. Y.

1 8 14 6 1,67950 NO-PRO

THE EVOLUTION OF THE TRANSIT LETTER—FIRST LINE SHOWS OLD METHOD OF RECORDING THE DETAILS ON A TRANSIT LETTER BY HAND—SECOND LINE SHOWS THE SAME WORK BY MACHINE—THIRD LINE SHOWS THE NUMERICAL TRANSIT SYSTEM AS OPERATED BY A TRANSIT MACHINE

The blank numbers to be left as follows: Population of 5,000 to 25,000, two blank numbers; 25,000 to 50,000, three blank numbers; 50,000 to 100,000, five blank numbers; 100,000 and over, six blank numbers.⁴

THE TRANSIT DEPARTMENT IN OPERATION⁵

The transit department is one of the most important departments of a bank, especially in the banks of large cities, and therefore it is absolutely necessary to have the best system possible for taking care of the many transactions that daily pass through that department.

Assuming that most banks have the department so arranged that it handles both incoming mail and outgoing items, that is. all items received as cash, it perhaps is well to give an idea as nearly as possible of how all such matters are handled and perhaps a better knowledge may be obtained by starting with the morning's mail and following

⁴As described in pamphlet on "Clearing-Houses" issued by the American Institute of Banking.

⁵By Edward E. Schoeneck, of the Corn Exchange National Bank of Chicago, before Chicago chapter. By courtesy of the author.

the work from there on. Before going on with the subject it might be well to state that in order to have a thorough knowledge of all the work as outlined and for the bank's best interests the only way to handle the incoming mail and the collecting of transit items is to handle these in one department. The clerks become more familiar with all arrangements and the correspondent banks will receive better service.

After the mail arrives from the postoffice, where it usual-



TRANSIT TYPEWRITER WITH ADDING ATTACHMENT
Courtesy Wahl Adding Machine Co., Chicago, Ill.

ly is received by a special messenger from each bank, it should be so arranged that it should then come under the supervision of the messenger department in charge of a head messenger, who should see to it that it is properly assorted by keeping out all personal letters. Then separate large and small letters, which, in turn, will be delivered to the transit department. All large letters or letters with many items, should be taken care of first, then follow with the miscellaneous small ones. Clerks should be especially trained to sort this mail after it is opened by the messenger department and here is where the transit department steps in and assumes its part of the work.

It requires close attention to these letters, and where the bank has a large amount of mail daily, the same must be assorted carefully and correctly by the clerks in the transit department, so that it will be received in a prompt manner by the collection department, discount department, transfer of funds, shipments of currency, remittances for credit of correspondent banks and returns for items sent from the transit department, etc.

These clerks should be educated to know the country accounts, so that when sorting the mail, they are able to pass upon it intelligently, but all matters of doubt should be referred to the head of the department and he or his first assistant, should see to it, that all letters which contain items on which exchange must be charged, should receive the proper attention and a debit ticket should be made for all charges. The debit tickets should be handed to clerks that advise the credits and they should advise the amount so charged, checking each debit with the letter on which the exchange is charged, then at the close of business each day, the total amount of debit tickets can be credited to the exchange account. It facilitates bookkeeping to charge the exchange by ticket instead of deducting it from each letter and the correspondent banks can check their statements without trouble. Some banks prefer to have a monthly statement of their charges and this can easily be taken care of by having a certain clerk look after such arrangements.

As soon as each assorter has a number of cash remittances ready, they should be delivered to clerks to check, and these clerks should so mark their letters that as few figures as are necessary will have to be used by the clerk that has charge of what may be termed the in-mail box. For example, one letter may contain a mixed lot of checks, say five or ten on New York City, ten or more on Chicago, and perhaps a few outside checks, some currency or coupons, and also city cash collections. To illustrate this further a chart is given which gives the idea more clearly:

N. Y.	:	:	:	:
C. H.	:	:	:	:
Tran.	:	:	:	:
Col.	:	:	:	:
Cy or Coupons.....	:	:	:	:
Total	:	:	:	:

This can either be arranged by having a stamp made to put on each cash letter as it is handled by the checker, or a small slip attached to each letter, will answer the purpose. Each checker can make up the totals by first running the amounts on an adding machine, then transfer them to this "make-up" slip for the convenience of the clerk that has charge of the "in-mail" book. It is well to have your correspondents so instructed wherever possible that they will

JOHN A. LYNCH, President.
W. T. FENTON, Vice-President.

M. MCKINNEY, Cashier.
R. L. CRAMPTON, Assistant Cashier.

O. H. SWAN, Assistant Cashier.
THOS. JANSEN, Assistant Cashier.

THE NATIONAL BANK OF THE REPUBLIC.

CAPITAL \$2,000,000. SURPLUS AND UNDIVIDED PROFITS \$1,000,000

NATIONAL CITY BANK

CHICAGO MAY 20 07

NEW YORK N Y

We enclose the following items for collection and credit,

PROTEST ALL ITEMS \$10 AND OVER UNLESS OTHERWISE INSTRUCTED.
WIRE NON-PAYMENT OF ITEMS \$100 OR OVER.
SURRENDER DOCUMENTS ATTACHED ON PAYMENT ONLY.

Yours very truly,

R. M. MCKINNEY, Cashier.

IMP & TRADERS NAT BK	2 000 00	ILL SEWING MACH CO
2ND NAT BK	30 000 00	M PHILIPSBORN
UNION EXCH BK	12 500 00	"
NAT BK COM	3 200 00	"
NAT PARK BK	1 078 90	G WACKENREUTER
IMP & TRADERS NAT BK	2 500 00	STEERIN MAYER & CO
NAT BK COM	2 119 45	PACIFIC COAST BORAX CO
UNION BK BROOKLYN	1 615 17	NAT WASHBOARD CO
NAT BK COM	10 000 00	13 N W TR & SAFE SEATTLE
NAT CITY BK	1 568 00	CHG PNEU TOOL CO
IMP & TRADERS NAT	2 020 41	J V FARWELL CO
	68 601 93	

SPECIMEN

TRANSIT LETTER—THE NAMES OF THE BANKS IN THE COLUMN AT THE LEFT WOULD, UNDER THE NUMERICAL TRANSIT SYSTEM, BE DESIGNATED MERELY BY NUMBERS—THUS "1-54" WOULD INDICATE THE NATIONAL PARK BANK IN THE FIFTH LINE

separate their items, i. e., the clearing-house checks and the out-of-town items, so that when the remittances are received, all that is necessary is to put the total on each package, charge to the proper department and they are obliged to prove all such packages. After the packages are proven, then take a recapitulation of the package totals and this will tell if they have been run off correctly. A machine is now on the market which assists in proving the packages by having the grand total ready when the last package has been proven.

As the "in-mail" book takes all the cash remittances after

they have been checked by the checkers this work is best illustrated by the form as follows:

Debit

C. H. Singles	C. H. Packages	New York	Transit Singles	Transit Packages	Note Teller
------------------	-------------------	-------------	--------------------	---------------------	----------------

Credit

Gen'l Bks.	Nat. Bks. A. to K.	Nat. Bks. L. to Z.	Bk. & Bkrs. A. to K.	Bk. & Bkrs. L. to Z.	Dfts. Exch.
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The "in-mail" work should be balanced according to lots or batches, say any number one to five or more, which would enable you to locate a difference in a very short time. After each department has balanced with this clerk, he then takes a trial balance and if the figures agree, slips can be filled out and the figures turned over to the note teller or transfer teller, as follows:

Mail Debit.

Date.

Clearing House	:	:	:	:
New York	:	:	:	:
Remittances (transit)	:	:	:	:
Remittances (transit)	:	:	:	:
Note Teller	:	:	:	:
Currency	:	:	:	:
Coupons	:	:	:	:
Total	:	:	:	:

Mail Credit.

Date.

General Books	:	:	:	:
Nat'l Books A to K.....	:	:	:	:
Nat'l Books L to K.....	:	:	:	:
B. & B. Books A to K.....	:	:	:	:
B. & B. Books L to Z.....	:	:	:	:
Country Individual Accts...	:	:	:	:
Drafts	:	:	:	:
Exchange	:	:	:	:
Total	:	:	:	:

In transit departments where both incoming and outgoing mail is handled, there should be clerks to handle all cash "charge-up" items returned unpaid, transfers to New York and other cities, advising shipments of currency, as well as remittances to banks for items received for collection from banks that have no regular account on the books.

These clerks can arrange to advise all credits received from correspondents, after they have been entered on the books by each bookkeeper who receives the credits from the "in-mail" book previously mentioned.

It is necessary to have some kind of record of the terms with each correspondent bank, and a card with this information already printed on gives a clerk an idea of what to follow. After the account has been opened the information necessary can be added to that already on the card and on the reverse side a memorandum can be kept of special agree-

UNION BANK & TRUST CO.

Jackson, Tenn. _____ 19__

Dear Sir: _____

Enclosed please find for Collection and *Credit*
Items enumerated below. *Remittances*

PROTEST ALL PAPER UNLESS OTHERWISE INSTRUCTED.
 ITEMS UNDER \$10.00 NO PROTEST.

	ON WHOM DRAWN	AMOUNT
1		
2		
3		
4		
5		
6		
7		
8		

TRANSIT LETTER FOR CASH ITEMS—CARBON AND PENCIL PROCESS

ments, but all letters pertaining to these arrangements should be kept in a special file for that purpose. It is also well to know what your correspondent banks are charging and a card with the itemized rates will be found useful. In fact, the card system has been found a most important part in the keeping of records in a transit department and is referred to frequently. This does away with trying to keep records with too many different clerks or in books where the information is not always readily accessible.

In most large banks it is so arranged that a certain clerk is given charge and perhaps is called the manager. He must see to it that the work is divided among his many assistants so that no part of the book work is to be done by him; he should have the power of making terms for handling his items; must constantly be on the lookout for new arrange-

ments that would benefit the bank; must arrange for the par points to be given to the bank's correspondents; must see that all large items are given special attention and especially cost items, and must endeavor to obtain special rates on the same. He must also educate his assistants to handle this part of his work and must have at least one clerk who may be called his first assistant, trained so that the work of the bank or department will not be dependent upon one person only. This rule should be applied to each and every member of the department and each clerk should have a set of rules or instructions pertaining to his work, so that a change can be made at any time without inconvenience.

The foregoing gives an idea of the general routine of the work before we take up that part of the department which will now be outlined after the "in-mail" clerk sorts his transit items. You will notice on a previous chart that they are listed so that the packages are in one column, singles in another.

In the department there should be a clerk called "scratcher" man, who receives these items from the mail book and after listing the packages they are proven as previously stated and as each package is ready, it is delivered to the "head router" and it is here where a most important part of the work of the handling of the outgoing items commences. The manager of the department should arrange it for this clerk so that he can assort his items in the best manner possible; and while some banks arrange the sorting of their items by lists, a very good way is to copy the lists of your correspondents into a book, using a bankers' directory specially made for that purpose and by this method it does away with having to look after too many records perhaps kept in different places. When obtaining lists from your correspondent banks, you should ascertain what points are handled direct by them and what indirectly and this information should show in the book mentioned. You agree upon certain marks for a "direct" point and when not marked the point will be considered "indirect." When referring to this book you will readily find whether it would be to the bank's interest to route indirectly a very large item, and it perhaps would be well to give instructions to the head router not to send items in that manner when over a certain amount. New lists should be received from your corre-

spondents at certain intervals, so that the records would be up to date.

The head router should have a desk or table so arranged that the items could be assorted in different boxes and he should have sufficient time to enable him to assort his items correctly.

The work should be arranged in sets, so that, for example, all items that go to correspondents in large cities where accounts are kept are in charge of a clerk and the work, which is of sufficient quantity, will indicate that large letters are necessary. This work can be done on machines which are specially built for that purpose, such as a Remington typewriter machine with Wahl adding attachment, Elliott-Fisher machine and others. The Burroughs Adding Machine Company are advocating the handling of transit letters on their machine, by using the number system for endorsements and the number system for the drawee, for items on banks in large cities, i. e., large letters.

It is well to have the work so arranged that each clerk receiving a certain amount of items is charged with that total, so that he can balance his work independently of another. This can be arranged according to the amount of work each bank handles and if the volume of business is large, the work can be so fixed that one or more States can be divided according to the amount of business on each State, and this will assist the head router in knowing just where to sort his items. The items are assorted according to the town by the alphabet by some banks, but this can be worked out very easily according to the way each bank prefers. This applies principally to that part of the items for which the banks remit by draft. All "charge up" items can be assorted to clerks who have accounts that allow banks to charge items to their accounts, and this can be divided by calling the divisions, say: "National charge up accounts," "Banks and bankers charge up accounts," and would be arranged in sets according to the number of bookkeepers in each bank. These can be run on books of small letters which are carbon copy, say twenty letters or more to each page, using a number for banks that remit for items and for all small "charge-up" letters of same size it is not absolutely necessary to have the number system, the date being sufficient in tracing an acknowledgment.

All "large" letters that banks allow to be charged to their account can be handled on the large machine sheets just mentioned.

After receiving his checks each clerk should make a list of them on the adding machine before sorting them to charge to his correspondents on his set and keep adding to his list after he has assorted the first lot. The sum of all these lists must agree with the totals of the letters and he will know his work has been balanced each day. Then each clerk should give the totals of his lists to a clerk in the department who should have charge of what is called a "proof scratcher" and the sum of these lists on his scratcher should agree with the total amount charged to the other scratcher, which is a proof on the work received from the mail book and tellers. The "proof scratcher" should see to it that figures are then turned over to the general bookkeeper representing the total of the work handled in the department for the day.

Some banks handle as cash a large amount of drafts with bills of lading attached. These are handled in the transit department and if the volume of business is sufficiently large, a special book can be used to record each draft, so that full costs can be recovered, i. e., exchange and interest for time drafts were outstanding over a certain number of days.

All work in the department should be carbon copy. Many banks throughout the United States have their work so arranged that practically all of it is done by machines previously mentioned.

Banks are continually on the watch for systems that will improve the work in this department and it is safe to say that there is no department in a bank that requires as many changes as the transit department, and usually the new innovations are an improvement, so that the department is bound to be one of the best in a bank, when properly managed. There was a time when the work was done by pen and ink and copied in a copy book. Registers were kept and in many instances banks kept a complete record of each check. The changes that have been made certainly are wonderful.

The work of the transit clerk is best illustrated when you consider that he must see that his items are sent to the right correspondent; he must see that the proper instructions

are entered on his letter; he must watch to see that all items are endorsed correctly. Some banks have clerks whose special duty it is to endorse the items. Some endorse them "Pay any bank or banker," etc., and many prefer to endorse them to the bank to which they are sent. The latter is the proper way and does away with the question of a qualified or restrictive endorsement.

The transit clerks must also see that all items are paid or advised promptly, and if not, notify the customer; should balance his outstanding or unpaid items regularly and also trace those not accounted for, collect interest on overdue drafts and watch for other similar matters which may occur from day to day.

It is well to keep a record of the number of checks each transit man handles; this gives you a good idea of the amount of business transacted and the information proves very interesting from year to year.

As each clerk should balance his work separately as previously stated, a special book should be kept by the manager of the department or his assistant, of the amount each clerk has outstanding and the totals in such book should agree with the amount outstanding according to the total on the general books.

Some banks have their work so arranged that when the letters are ready to be sent out, they are delivered to the messenger department and under the direction of the head messenger he has the clerks in his department handle the outgoing mail by allotting a certain number of letters of the alphabet to each man according to the volume of business. By this arrangement, they are able to enclose items from the different departments all in same envelope when intended for a certain bank, thereby saving quite a sum to the bank in postage, and at the same time have the mail in such shape so that it can be handled by the correspondents in a more satisfactory manner than if they were to receive probably half a dozen or more letters from a bank daily, especially where banks in large cities deal extensively with banks in other large cities.

CHECK REGISTER

DRAWN ON

Date	TO WHOSE ORDER	Number	Amount	Total	Paid	FOR
	<i>Amounts Brought forward,</i>	00				
		01				
		02				
		03				
		04				
		05				
		06				
		07				
		08				

CHECK REGISTER USED IN PLACE OF CHECK BOOK STUB

CHECKS DRAWN ON BANK DEPOSITS

Date	Pay to Whose Order	Account of	Number	✓	Discount	Amount Check	Total Checks	Date	Amount Deposits	Balance
		<i>Amount brought forward</i>	50							
			51							
			52							
			53							
			54							
			55							
			56							
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RECORD OF CHECKS AND DEPOSITS

CHAPTER XII.

BANK EXAMINATIONS AND AUDITS

The examination of a bank has for its purpose the determination: (a) That the bank is solvent; (b) that it has, as it claims to have, assets of certain worth; (c) that its methods are clean and its management conservative and sound; (d) that the technique of its operation is efficient and modern, and to suggest changes in the system to make it a smooth running accounting machine.

The examiner going from bank to bank acquires a fund of information that he can use to advantage, if the bank be in a receptive mood and is anxious to improve its service, and can advise the officers in many things to their profit.

Frequently we see men overworked for no useful purpose; doing things in the hardest way; doing the same work twice when once should suffice; writing where a rubber stamp would be far better, and failing to appreciate the usefulness of the carbon sheet and other labor-saving devices that make for efficiency in the day's work. But such are the conditions in large and presumably well-managed banks that lay claim to aggressiveness. The author once had the pleasure of drawing up a plan to reduce the operations from seven to four in handling mail items, only to find the Chinese wall—"We have always done it with seven, why four?"—in his way; and they do it with seven yet. In another case the deposits were listed on sheets each day and the entries on each sheet counted to record the number of items. And no one had ever thought of numbering the lines!

RIGHT TO EXAMINE, POLICE POWER

This right to examine is recognized as part of the police power of the State, for the good of all; and while in England there is no such thing as bank examinations, each bank being a law unto itself, such a condition here would lead to chaos in the banking world; for we need the steadying hand of supervision to keep the ships off the rocks, even the little ones.

The ultimate end and aim of the examination is to protect the stockholder and the depositor from losses due to unsound banking operations. The large stockholder needs protection from the directors and other stockholders, the little stockholder needs protection from the big stockholders, the depositor needs protection from both, and the directors need protection from themselves.

While the law imposes a liability of twice the capital holdings, it is seldom if ever collected in full, and the penalty if enforced upon the little fellow would be difficult to recover: and even though it were not so, to protect him for his own sake is worth while. Many a stockholder invests with no thought of his risk, looking only to his dividends; and in his ignorance he should be assured of sound policies and solvent condition. It goes without saying that the depositor needs, and is entitled to, all the protection that proper examining methods can give.

BANK EXAMINATIONS OF TWO CLASSES

Bank examinations may be divided into two classes: (1) External examinations performed by the Comptroller of the Currency, State banking departments, clearing-houses and periodical audits by certified public accountants; and (2) internal examinations or audits made by the bank's auditing staff or public accountants. The latter is in the nature of an internal audit by an outside source, but the audit is by order of the bank and not by an independent supervising body. The most common form of internal audit is the examination by the directors—a bank examining itself.

Checking the books of a bank does not warrant the solvency of the bank any more than checking the books of a mercantile house warrants profits. It is not an audit. The examination should be what the accountant would call an investigation: as if the books of the bank were destroyed, and the problem was to ascertain what the bank owned and what it owed independent of its records. And without using the books of record, except as a guide, a bank may be fully examined.

EXAMINATIONS BY DIRECTORS

It is reasonable to conclude and easy to prove that an audit of a bank cannot properly be made by a committee of directors. In the first place they do not know how, and are often coached by one of the bank's administrative heads; secondly, they have not the time to do it properly, and as a rule verify the things that hardly need verifying, and overlook the things they should inquire into.

With all the solemnity of a judge of the Supreme Court, they will come in, without warning, count the cash, call for the bonds, and perhaps look over the loans and discounts, and it may be verify the bank balances; but overlook the most important thing—the accounts with depositors.

Some well-managed banks are now recognizing the fact that the board of directors cannot make a proper audit and so employ outside accountants for this purpose, and this is as it should be.

An accounting firm of high standing submit the following as their conception of a true audit:

First. We count the cash in detail at the date of our audit.

Second. We submit a detailed report of all cash items which are being carried by the bank.

Third. We verify the balances due, to and from other banks, by correspondence.

Fourth. We submit a detailed list of all overdrawn accounts showing the date the overdraft commenced.

Fifth. We verify all loans and submit a detailed statement of each borrower's, director's, officer's, and clerk's liability as maker and endorser.

Sixth. We submit a detailed statement of all suspended or past due paper.

Seventh. We verify all securities owned, by count of same.

Eighth. We verify all deposits by trial balance of the ledgers, and we examine all pass-books presented during our stay at the bank.

Ninth. We verify the outstanding capital stock by examining the stock records.

Tenth. We place a sufficient force of accountants on the work so that our examination will be completed promptly.

Eleventh. We submit a complete, detailed, typewritten report, covering our audit, and we include therein all suggestions for improving the accounting system. This report is addressed to the president, or to some one authorized by the board of directors.

Twelfth. There are other features of our examination which we would not care to reveal, as they are safeguards which we employ to detect shortages or manipulations.

Mr. E. P. Moxey of the Comptroller's office in Washington tells this incident:

"While preparing a bank case for trial I was much amused by reading, in the minutes of the meetings of the

board of directors, a report of a committee of the board on the result of their examination of the bank. As far as I recall the wording was somewhat to this effect: 'Your examining committee begs leave to report as follows: We met at the banking house on 'Thursday last, after the close of business, and counted all the cash in the possession of the several tellers and that in the vaults of the bank, and found the same to agree with the amount called for by the books. We examined all the loans and discounts, with the collateral securing the same, also the stocks, bonds and securities owned by the bank and found the same to be correct. We also examined all the books and accounts of the bank, and found the same correct in every particular. The income and expense accounts for the past six months were carefully audited by us, and are correct. We completed our examination and adjourned at six-thirty P. M.'

"And the report might have added—'in time for supper in the board room.'"

WHAT THE EXAMINER SHOULD KNOW

The qualifications which must be possessed by anyone who wishes to be considered a competent bank examiner are:

First—He must have a pleasing personality, tact and character.

Second—He must be an accountant of experience.

Third—He must have had business and banking training.

Fourth—He must be thoroughly versed in all the minute details of the banking business and know some of the avenues of fraud.

Fifth—He must be well posted on financial subjects.

Personality plays an important part in the qualities of the examiner. A certain gentleman creates a most unfavorable impression while examining a bank, on account of an unfortunate trait in acting as though he considered every clerk in the institution a thief. As a consequence, and properly so, he is thoroughly detested by them, and instead of receiving their hearty coöperation in his work, every obstacle is thrown in his way to impede his progress.

A thorough knowledge of accounts, not only those of financial institutions, but those of other lines as well, must

be possessed by the competent bank examiner. This knowledge should be acquired preferably through experience, but the general principles on which all accounting rests may be acquired from those institutions which offer courses in higher accounting. The more experience a person has had in accounting work the better bank examiner he makes.

Of course the most important thing that makes toward a competent bank examiner is a thorough familiarity with every detail of the banking business. Unless a man knows the various books and records used in each department of a bank it is impossible for him to make a proper examination.

Not many years ago a leading member of Congress prevailed upon the then Comptroller of the Currency to appoint as national bank examiner for his district a gentleman whom he praised highly as being thoroughly qualified for the position. As a matter of fact that gentleman in question had never been inside of a bank in his life, except to make a deposit, draw a check or have a note discounted. It is needless to say that his examinations were mere farces, and the story goes, that the cashier of one of the banks he was trying to examine, out of the goodness of his heart, made out for him his report to the Comptroller.¹

The examiner should not approach his examination as a detective looking for a criminal, but as a big-hearted individual looking for an opportunity to help; to give a clean bill of health if possible, but to discover the weaknesses if any exist; to build up by testing and not destroy by criticism. And if he goes at it aright, makes friends with the men, is dignified but agreeable, he can get much help from the force.

THE PSYCHOLOGY OF ERRORS

The knowledge that one's work is to be scrutinized tends to make one careful in that work. The exercise of care soon becomes a habit. And careful habits lead to efficiency. And efficiency leads to promotion and success. Errors are usually the result of inefficiency.

I have in mind a case of a large bank where the force of an entire department worked until late at night in the endeavor to locate an error of \$5,000 in the day's work. When

¹Mr. E. P. Moxey before New York Chapter.

this was finally discovered it proved to be an item for \$5,000 added to a remittance letter after the same had been footed without a corresponding change being made in the total. The person directly responsible for this error was a young fellow whose thoughts were not centered upon his work.

Not all errors, however, are made unintentionally. There may be those who have been unfaithful to the trust reposed in them, and who have applied the funds and moneys of the bank to their own use. This stamp of man lives in constant dread of detection, for, by an unexpected examination of his books, should he be a clerk or bookkeeper; or by a verification of the securities owned by the institution or held by it as collateral for loans, of which he may be the custodian; or by a count of the money on hand, should he be a teller, he realizes that detection is inevitable.²

An error known to exist should never be allowed to run long without locating it, unless certain that it is not the beginning of a trail.

It is the examiner's duty to trace little things to their end and find out what they mean, for they may lead to serious developments.

On a certain day in a large city bank the incoming mail department found at the close of the day's work a shortage of a few hundred dollars. The work of the day was checked and the auditor discovered that several checks of even amounts, as shown by the incoming letters, had not been accounted for. He immediately secured complete descriptions of the items, and learned from the bank where they were payable that they had been paid two days later than the date of receipt. The next move was to check the day's work on which these items were actually paid, and the examination brought out the fact that these checks had been inserted and other checks of the same amount taken out. The same process was then used in locating the checks of the second day, and the examination proved that this substitution was made every second day. This process was continued for a period of about two weeks. The party, then thinking he had covered his tracks so that tracing of the items was almost impossible, drew several fictitious checks to the amount of the items already out, and drew them on a bank that it

²Mr. Moxey.

was customary for him to list in preparing the clearing-house exchanges. He then proceeded to open an account in a small out-of-town bank (this bank being a correspondent of the employing bank), and when the checks were forwarded to their correspondent for payment, they were substituted for the amount taken out two days before, and of course destroyed.³

HOW TO MAKE AN EXAMINATION

The word assets comes from the French *assez*, meaning "enough," and the question to determine here as in the granting of credit is, "Is there enough?" The examination of the resources usually takes the larger part of the examiner's time, while little attention is given to the liabilities, which is no doubt due to the limited amount of time at his disposal. While proper attention should be given to the assets, as much, if not more thought should be given to the liabilities, for the individual ledger is probably one of the most fertile fields in which to detect wilful wrongdoing, and this usually receives the least attention from the bank examiner.⁴

In the small country banks, where the duplicate system is not in use, there is very little check on this portion of the work. The bookkeeper in charge of the ledger also balances the pass-books, so that he is in almost complete control of this particular portion of the work.

The following directions for an audit, taken from a work on accounting over four hundred years old, are interesting, both for the language and the exactness of the procedure: "And for the more expedition and clearness, ye shall keep this order, which is that ye take and assign one of your fellows to help you; for it were much labor and overtidious for one alone to examine all that belongeth to this act. Wherefore for the more speed, first deliver to your fellow the Journall and hold yourself the ledger. Then request your fellow that hath the Journall to begin with the first parcel of said

³Address before New York chapter. Author prefers not to be quoted.

⁴An examiner of country-wide reputation stated to the author recently that he always examines the individual ledgers personally, for some of his greatest achievements as an examiner have resulted from clues which began with suspicious entries on the individual ledgers—particularly "kiting" operations.

Journall, and that he tell you the name and the thing and in what leaf of the ledger it standeth, in debtor or creditor, so that you may perceive to what leaf he sendeth you.

"And when you have found the parcel by the showing of him that hath the Journall, then mark and make a token in said ledger in the same parcel with a tick upon the amount, or some other sign so that it be no blemish in the book. That done, say to him that hath the Journall, that he also make a tick or sign of your concordance. And beware that none of you, without consent of the other, mark any parcel, by reason whereof might grow grievous labors to reform the correction again of the same. For the parcels discreetly perused and so marked, testifyeth a due examination.

"Then proceed ye forth to your work and by examining your Journal and Ledger together of all the parcels both Debtors and Creditors by the which doing, thoroughly examined ye shall perceive and find if your said ledger be perfectly governed and compiled or not. And note you also that every one parcel in your Journall must for the concordance have two ticks, because it ought to accord with two parcels in your ledger, one in debit and the other in credit."

As to the bookkeeping end, the first thing to do is to close the books and take a statement, so that a basis of reckoning may exist. Some banks, particularly savings banks, do not take a daily statement of the general ledger and the books would have to be closed to get this information. The examiner might use the ledger for this, but a statement from the ledger should be taken as a guide and also as a record of how the bank stood when the examination was made.

Upon beginning the examination, the examiner places his seal on all vault compartments, so that substitutions and manipulations are impossible. If the securities are kept in another safe-deposit box or in another city, as frequently happens in the case of country banks which keep their bonds in New York or other large city, the sealing should be done by a representative. In New York, the Banking Department is communicated with and a representative of the department seals the box wherever it may be. This of course requires credentials and such are furnished the one sealing. If securities are held in other banks on loan, for special deposit, or other purpose, the holding bank is notified of the

fact that the bank is under test and to hold the securities accordingly.

CASH AND EXCHANGES

Cash is, of course, counted first, and it should all be brought to the examiner at one time and kept by him until verified. Packages may be verified first in bulk and then in detail, or vice versa. Ones and twos if in large volume are not counted except in bulk, or tests made to verify a package occasionally. No serious loss could come through such a medium and it is essential not to block the wheels by too many small details that lead nowhere. Gold and silver are sometimes verified by weight if the quantity is large.

There is what is called in accounting "lapping," which consists in holding out from the cash items sufficient to cover a shortage so that the cash will show the balance called for. Thus, a teller might hold out enough deposit tickets at the end of the day to make good a shortage, since he would not have to account to the bank for the deposits until the next day, when he would hold out some more and so on. Such a process is, of course, difficult to check except by passing the deposit through two hands, or substituting tellers so that such manipulations are difficult.

After the cash has been carefully counted the matter of arranging for the verification of the exchanges should be taken up, in fact, these two items—cash and exchanges—should be taken up together if the force of examiners warrants. In the clearing-house banks of New York City the following plan for the verification of exchanges has been worked out with splendid results. The examiner in charge of verifying exchanges takes off a list of the amounts due from each bank as they appear on the envelope about to be sent through the exchanges, placing in the envelope a request for verification of the amount, and seals the envelope with the seal of the banking department. Later the verification is sent to the examiner in charge of the metropolitan district by the receiving banks.

COLLATERAL LOANS

A list of the demand loans should then be made and the amount proved with the general ledger. This may be ac-

completed by listing the amount shown on the several loan cards, and the total of such cards should prove with the amount shown on the daily proof. The cards should then be retained in the examiner's possession until the securities have all been verified. The collateral to these loans should then be examined and the securities checked with the record as shown on the loan cards. The market value of the collateral should also be checked to ascertain if the necessary twenty per cent. margin is in hand.

If the examination is a thorough one, the amount of the loans and collateral pledged should be confirmed by the parties to whom the loans have been made. Defalcations have frequently occurred by the failure of the loan clerk to endorse partial payments, or amounts paid on loans, before they become due. The usual custom in such matters is to endorse the amount paid on the back of the note and credit the amount to the proper account through the note teller's department. If the loan clerk is so disposed, these payments may be easily kept from the records until the notes mature.

One means of defalcation is for a loan clerk to withhold a portion of the securities pledged for a certain loan. For example, here is a loan to a customer for, say, \$100,000, and the collateral deposited to secure such loan has a market value of \$135,000, or a margin of thirty-five per cent. The loan clerk may account for \$125,000 worth of these securities and appropriate the balance of \$10,000 to his own use. He has made a record of but \$125,000, so that in the auditor's examination the securities in hand check with the cards. To guard against this, a blank should be sent to each borrower requesting him to give the amount of his loan and list of securities.

The examiner does not display his hand, and so sends to borrowers a letter, enclosing statement of the loan and collateral, with instructions to verify and return, "to facilitate the audit of the bank." The letter might be addressed to the sending bank with the initials of the examiner in the corner, but the intent is to prevent it coming into the hands of any bank employee.

The loans may be classified according to the books, or according to the examiner's notions into: (a) Collateral loans secured by stock exchange collateral, and those secured by

other collateral; (b) loans secured by real estate; (c) single-name paper; (d) two-name paper. Further, if desired, into "own paper" (customers), and paper bought through brokers. The stock exchange loans will, therefore, be by themselves and can be quickly tested; while the other loans might need more attention.

Loans secured by real estate should have the bond and mortgage properly recorded or assigned, insurance, title search or abstract, and appraisal by a committee or by an independent party. The value of the property is the essential element here, real estate loans scarcely ever being made on the basis of moral or financial worth, the loan being based solely upon the property pledged, and a list once made in a bank carrying any such as a steady policy should be kept for future reference.

UNSECURED LOANS

Promissory notes, whether paper bought in the market, or home paper, must, of course, be dated, unmatured, properly executed, without alteration, and regular in every form. In the analysis of the loans the item of "Past Due" should be first taken up.

A careful list should be made of the various items, giving in detail the date of the instrument, maker, all indorsements, due date, whether or not the note has been protested and the present status: that is, what the possibilities of the collection are, making a note at the same time of the name of the attorney if the item is in suit.

The amount due from various parties, especially directors, should be inquired into, and if the bank does not keep a liability book it should do so. The paper must be what it purports to be, and the parties good. Often the examiner will have a wide credit acquaintance, and know many of the makers of commercial paper. For instance, the name of a Chicago packing house would be known to every bank examiner and finding such paper he knows just how good it is. Local paper is best known to the directors and they should be called in and asked to pass upon paper of that sort. As a rule the directors know nothing of outside firms selling paper through brokers and this appraisement can best be done by the examiner. Of course, if time per-

mitted the statement of each borrower could be checked, but this would be a lengthy task.

In order to keep tabs on borrowers all over New York State, and to ascertain the line they are carrying, the New York State Banking Department is now operating a credit bureau aimed to list every loan of \$5,000 or more by name, the bank holding and the parties. This gives the department a check on large borrowers in every bank in the State. Borrowers have been found having borrowing accounts in thirty different banks.

The bills discounted or bills purchased should be checked with the discount ticklers. The discount tickler is a record of the bills discounted assembled under the different dates in which they become due. As the notes themselves are filed in a cabinet in the same manner, the checking of the items to the tickler becomes a very simple matter. The total of these books, together with the past due notes, should correspond with the amount of bills discounted on the general ledger. All notes which have been forwarded for collection must be verified by correspondence, as well as all collateral held by other institutions. Totals made by adding machine should be proven, and no clerk allowed to make these lists. Nothing should be taken for granted.

GOVERNMENT MONEYS AND SECURITIES

The receipts from the United States Government for bonds deposited to secure circulation and United States deposits should be carefully checked. All United States bonds to secure circulation, United States and other bonds to secure United States deposits, must be deposited with the Treasurer at Washington, for which he issues a receipt. These securities must be verified by the receipt in possession of the bank.

DUE FROM BANKS

A list of the items composing the balance due from banks should be made and the amounts forwarded to the respective banks for verification. The account of "Due from United States Treasurer" is also verified and the amounts checked from the advices received from the Treasury at Washington.

VERIFYING THE LIABILITIES

The liabilities of the bank should be verified with even more care than the assets, for these are easily understated. The capital stock of the bank may be verified by listing the outstanding stock certificates, and this may be readily accomplished if the cancelled certificates are fastened to the stub from which they were originally taken.

The liabilities are best verified by correspondence or by coöperation with the creditors. But the main liability being on the deposit accounts it becomes very important that this liability be not understated. There is no way by which this can be done except by communication with the depositors in some way. In a savings bank this is done by examining the pass-books as they come in and calling them in. In Massachusetts all books are required to be presented once in three years for verification purposes and all banks advertise for books and in some cases verify as high as ninety-five per cent. But in a bank of discount the verification is not so easy a matter.

In a majority of the larger banks the use of pass-books has been discarded, except as a receipt book for deposits, and statements similar to those used for correspondent banks have been substituted. This method is an improvement over the old one, as it enables a bank to have its accounts balanced each month and mailed to the respective customers from whom a report is usually received in a few days. These statements should be sent out and checked as to reconciliation by the examiner.

If the old pass-book method obtains, the books may be sent for and written up. Depositors cannot verify their balances without knowing what checks are unpaid, and, of course, vouchers must be returned with any statement of reconciliation.

The correctness of balances due other banks may be verified by statements rendered or received, which serve as the basis for reconciliation reports, disclosing the outstanding items of difference, which must be satisfactorily adjusted.

The New York State Banking Department has designated a man to handle the verification of these accounts and all data received by him from the examiners is used for this

purpose. The result is a very thorough verification of this item.

Items in the assets requiring careful analysis and verification are furniture and fixtures, accrued interest and suspense account. Very often there will be found charges to furniture and fixture account which are not proper items to be carried in the assets. Accrued interest will often be found to be a harbor for items which cannot be regarded as assets and the same may be said of suspense accounts. Loans have been charged off as uncollectible and the accrued interest on same still carried as an asset. It has also been found that the furniture and fixture account has been padded by charges for repairs and alterations to building. Accrued interest, furniture and fixtures and suspense account are too often accepted by an examiner at the book value.

It is also important that a careful analysis of the assets should be made for the purpose of ascertaining the percentage of quick assets to deposits, or, in other words, what portion of the assets is readily available for liquidation of the deposits.

The paid cashier's checks and certificates of deposit must be carefully checked and a proof made of the outstanding items. The usual custom of keeping the record of cashier's checks is to list all such items in a register provided for that purpose, giving the number of the check and the amount. The total of all cashier's checks issued is credited to such an account on the individual ledger, and when such items are paid, they are, of course, charged against this same account. The paid items are then checked off the register and the total of all open or unchecked amounts must correspond with the balance in the ledger. In some institutions each cashier's check has a stub attached which is removed by the officer who signs the voucher. All such stubs are forwarded to the auditor and the amount of checks issued is verified by means of such tickets.

In a detailed audit care should be given the expense account, and in auditing this account great care should be observed to see that every bill presented has been checked and initialed by the proper officer. A voucher must be kept for every item charged to this account to enable the examiner to readily check the amounts debited. All "overs" or "shorts" in the different departments must be promptly located by

the auditor and the amount adjusted to guard against the possibility of a defalcation. The location of differences in the departments has been simplified by the installation of the sectional proof. The proofs enable the heads of departments to so divide their work that an error may be easily located.

CLEARING-HOUSE EXAMINATIONS

The clearing-house has come to be recognized more and more as a regulating force to make for good banking, as well as quick and expeditious banking; and clearing-house examination is a large step forward.

The people have come to look to the clearing-house to keep banking sound; to eliminate the bad; sustain the good and protect all. For the good of all concerned there will come a time when all loans in the banks of a clearing-house district will be listed with the clearing-house, for the information of all members. Such a bureau is promised for the Federal Reserve Banks.

It must be very embarrassing for a bank to find that it has loaned a firm up to the limit and another bank has done the same; when by an exchange of information both could have been warned. The banker who knows how much his borrower owes can make safe loans; the banker who does not, cannot. And the borrower who will not let his bank into these secrets had better be left alone.

It was the Walsh bank failures in Chicago that resulted in the carrying out of the idea to have the banks that are members of the clearing-house association, and banking institutions that enjoy clearing-house privileges, examined by examiners who were appointed by the association. The matter had been talked of before the Walsh failures, but no definite action had been taken to inaugurate the work. The Chicago Clearing-House Association formulated the plan, created the department and the office in 1906, and in June of that year the plan became operative.

Speaking of the plan and its operation, Mr. McDougal, the clearing-house bank examiner for Chicago, said:

"Having from the clearing-house committee assurances that every facility would be furnished to make the operations of the department successful, I was instructed to engage the necessary help, and to proceed upon my own judgment as to

the details and manner of examination. General directions were given me by the committee to make such examinations as would enable me to give them a correct impression of the general condition of each bank as examined. As a matter of course, what the committee particularly wished to know was the general condition of each bank, the character of its assets, and the manner of conducting its current business.

"After each examination a detailed report is prepared in duplicate, setting forth a description of the bank's assets, including all loans, either direct or indirect, to officers, directors or employees of the bank, or to corporations in which they are interested, also describing the condition as found and the work done in every department. One of these reports is filed in the vaults of the clearing-house in custody of the examiner. The other is handed to the bank's president for the use of its directors. The individual directors are then notified that the examination has been made, and that a copy of the examiner's report has been handed to the president. By so doing every director is given opportunity to see the report and to coöperate in maintaining a high standard in his bank. The examiner has in every case insisted upon receiving acknowledgments of these notices to directors.

"The detailed report referred to is not examined by the clearing-house committee, unless unusual conditions make it necessary. A special report is prepared and read before the clearing-house committee at meetings called for that purpose, expressing in general terms the examiner's opinion of the condition of each bank as he finds it, describing the general character of its assets and calling attention to any unwarranted conditions or gross irregularities, should they exist."

BENEFITS DERIVED

Among the benefits derived from these examinations the following have been named: "Mistakes of policy, as well as of judgment, have received timely correction; jealousies have been overcome; and suspicion and distrust, which not infrequently exist among banks having no real knowledge of the condition of each other's affairs, have been supplanted by respect and confidence. Closer, more satisfactory, and perfect-

ly harmonious relations have been established and are maintained."

In the extension of the idea of clearing-house examinations of the banks, the California Bankers Association has set an example for other State associations. It has divided the State into eleven sections, each of which is to have an examiner. The Minnesota Association, or the individual groups, have done practically the same thing. In California one of the sections is San Francisco, and Los Angeles is another section. The remaining sections take in counties or portions of counties. At present clearing-house examinations are being conducted in St. Louis, Kansas City, Minneapolis and St. Paul, etc., while in many other cities the subject is being considered and many bank officials are very anxious to have the plan put into operation.⁵

LITTLE POINTS FOR THE EXAMINER

The examiner should look particularly to little things. He should investigate any cash items that may be in the cash; check the petty cash fund; verify the day's exchanges and drafts sent out for collection; see that the last coupon is on all bonds. Mortgages should be properly recorded and taxes paid. Mortgage must not exceed the legal limits, usually sixty per cent. of the valuation of the property. Real estate owned should be evidenced by deeds, title policy and insurance should be in force. Overdrafts should not be of long standing. Liability of officers and directors should be investigated. Furniture and fixture account should not be excessively carried. See that no graft exists in renting the building. Banks sometimes give away offices—for a purpose. Check rents on bank building, and ascertain if any other money comes into the bank and is not made part of the accounting records. Such items as appraisals for real estate loans are often not made part of the bank's records. All cash that comes into the bank should be recorded, and then paid out by proper authority. Considerable opportunity exists in little things to do petty grafting. Dormant accounts should be investigated. Test interest calculations occasionally. Certificates of deposit long outstanding should be verified. Partial payments should be endorsed on the

⁵Charles W. Reihl in *The Bankers Magazine*.

stub, or better, old certificates should be cancelled and new ones issued. Verify cashier's checks in the same manner. Verify certifications. Verify margins on warehouse loans. Check back last published statement. Look over the minute book. See that it is properly kept. See if there are any excessive lines of credit. Are any advances made on the security of the stock of the institution? Are the officers and clerks sufficiently bonded? Are meetings well attended? Does the bank earn what it claims to earn? Banks have been known to report impossible earnings. Are the premises properly protected, vaults and safes modern, and other safeguards taken? Do the minutes provide for help without calling a special meeting of the board? Are the books always in balance? Are shortages frequent? Are the officers careful about the little things of the bank? Are interest computations properly checked by another clerk? Are supplies safeguarded, such as pass-books and loose leaf sheets?

To give a general idea of how a bank should be conducted in regard to some matters, the Comptroller of the Currency requires the following information:

Directors—Opposite the name of each director enter full amount of all paper in bank upon which his name (individual or firm) appears as maker, indorser, or guarantor, but where two or more directors are liable on the same paper, deduct from the total the duplicate liabilities, so as to show the net liabilities of all directors. Give the postoffice address of each director, his occupation and estimated worth and the number of shares held by him. State how often directors meet as board; whether they authorize or approve loans and discounts; in what form such approval is recorded; whether they have an active discount committee; whether they have an active examining committee; whether loans and discounts to their firms and corporations are specially acted upon by the board; whether the records show the directors who approve excessive loans. Ascertain, if possible, whether any director has become disqualified by hypothecation of stock; how often non-resident directors and officers meet with the board.

Officers and Employees—State the liability of each as payer, endorser or guarantor of any paper held by the bank, the amount of salary, bond, and whether engaged in any other occupation. Give number, aggregate salaries, etc., of

employees below the grade of teller and bookkeeper. State whether official bonds are in force; in whose custody lodged; who keeps the individual ledger; who balances the pass-books and when last balanced; whether compared by some one else; whether any employee receives deposits and makes entries in the individual ledger; who keeps the general ledger; who reconciles bank balances; whether they are verified by some one else.

Books and Accounts—State how often general ledger is balanced; what form of individual ledger is used, give forms of savings department and inactive ledgers; how often balanced; how often loans and discounts are verified; how often accounts with correspondent banks are reconciled; to what extent the envelope or statement system is used for depositors' accounts; how are certificates of deposit proved, and how often; how are paid certificates filed; are canceled certificates and drafts properly filed; are pass-books balanced frequently and noted on ledger; are proper entries made in redemption fund and circulation accounts?

Loans and Discounts—The loans and discounts and other securities must be carefully verified and every discrepancy noted. Give the total amount of loans and discounts and list separately the amount of bad debts as defined in the National Bank Act and other overdue paper itemizing doubtful items and losses. Itemize the loans exceeding the limit prescribed by the bank act, showing the names of the borrowers, the value of pledged securities and the financial standing of makers and indorsers. Give the name, amount and security of excessive lines of accommodation to one individual or interest, or affiliated individuals or interests. Include notes, bonds, stocks, and other forms of credit. If any portion of these lines constitutes an excessive loan, it should also be shown. State general character of loans; whether well distributed; general character of collaterals; whether corporations or enterprises in which directors or officers are interested borrow to an undue extent; any large liability of director or officer as maker or indorser—describe fully. State whether all paper claimed by the bank as its property, including collateral, is properly indorsed or assigned to it, and all mortgages properly recorded; give current rate of interest obtained. Itemize losses; does the bank place paper with other banks and to

what extent; are they liable in any way; do they take loans to accommodate other banks and to what extent; is sending bank in any way liable; list loans secured by other national bank stock, when the borrower is an officer or director in the bank whose stock he puts up. Give list of doubtful paper other than previously itemized under past due and bad debts; include doubtful real estate paper. State the aggregate amount on which real estate security has been taken for debts previously contracted, and the amount on which real estate security has been taken in violation of law. Give the amount of real estate owned other than the banking house, listing separately the amount taken for debts previously contracted and the amount acquired in violation of law.

Bonds, Securities, etc.—Enter number of shares of stock or face value of bonds, and state whether bonds or stocks. Give name of corporation issuing stocks, bonds, etc., amount at which carried on books, estimated actual market value. State whether taken for “debts previously contracted,” or otherwise, and if interest or dividends are not regularly paid, etc. Indicate those loaned or pledged in any way. If valuable assets of this class are charged off, list them.

Overdrafts—(Overdrafts are regarded as loans.)—State whether habitually granted and what amount is unsecured. Verify amount at date of examination and compare amount stated in last report of condition with amount shown by the books for same date. List those remaining in bank six months or longer. Itemize overdrafts of officers and directors and state whether habitual.⁶

Banking House—State whether suitable and convenient; for what other purpose used; whether carried at fair value on books; whether insured; if deed is in name of bank; whether vault and safe are good and secure; whether banking room is used by any other banking institution; whether furniture and fixtures are worth book value; give assessed valuation and gross rental.

Cash Items—Describe any irregular items and itemize losses estimated.

Reserve—Is an exactly daily record kept of the different kinds of money on hand? (1) Is total reserve sufficient?

⁶By a recent ruling of the Comptroller overdrafts are forbidden.

(2) Is reserve in bank sufficient? (3) Was the average reserve for the last thirty days in the bank sufficient, if not, what was the percentage? (4) Was the average reserve for the last thirty days with agents sufficient: if not, what was the percentage?

Capital Stock—State whether stock certificate book is properly kept; whether surrendered certificates are properly assigned, cancelled and attached to stubs; whether any stock certificates are signed in blank; whether stock ledger is properly kept; whether amount of stock outstanding was verified; whether bank owns any shares of its own stock, and if so, how and when acquired; whether bank holds any shares of its own stock as collateral, and if so, how acquired.

Affiliated Bank—(1) State whether there is an affiliation with any State bank, savings bank, or trust company through a controlling ownership of stock by the same shareholders, by practically the same management, or in any other manner, giving name of affiliated bank. (2) If transfer of certificates of stock of the national bank transfers ownership of stock of the affiliated bank, state that fact. (3) State whether stock of affiliated bank owned by shareholders of national bank is held by them individually or as a corporation. (4) State whether stock of affiliated bank is trusted for benefit of shareholders of national bank. (5) State whether any director or other officer is an officer of any other bank.

Dividends and Surplus—Give date of last dividend rate and amount and state whether semi-annual or otherwise; state amount carried to surplus. State reason, if any, why bank should not declare a dividend at end of current dividend period; whether you compared bank's last report of earnings and dividends with the amount of profits shown by its books at same date: whether interest paid is deducted from gross earnings and whether any profits are irregularly carried on the individual ledger, in special accounts, or charged off the books. Is itemized expense account kept and did you examine that account to date of previous examination? Did you examine earnings?

Due from Reserve Agents, Trust Companies, Banks and Bankers—State what rate of interest received on balances and whether certificates of deposit issued by other national banks are secured by collateral. List reserve balances.

Due to Reserve Agents, Trust Companies, Banks and Bankers—State whether amounts due are on open account or on demand or time certificates of deposit; whether they are secured by collaterals and rate of interest paid. (Forward report promptly without awaiting verification.) List reserve balances.

Individual Deposits—State rate of interest paid; whether a proper record of all certificates of deposit, cashier's checks, and certified checks issued is regularly kept in a book for that purpose, and give rate of interest. If bank conducts "savings department," give method of verifying pass-books and rate of interest. State whether previous notice of deposit withdrawals are provided for. If bank holds State, county, municipal, insular possession, or any very large balances subject to check, give list and rate of interest paid. Give total of inactive ledger. State whether surrendered certificates are properly cancelled and filed in numerical order for auditing. State whether properly audited by this method.

Rediscounts and Borrowed Money—List amounts of money borrowed, whether on bills payable, rediscounts, open accounts, certificates of deposit, bonds, or otherwise, and state where borrowed and date, interest rate, date of maturity, security, whether all liabilities are shown on books, whether authorized by the board of directors, whether bank borrows habitually.

Recapitulation—Recapitulate the following resources, showing whether doubtful, or indicating loss. Give the estimate value of assets in each class not shown on the books. Bad debts, other overdue paper; all other loans and discounts, overdrafts, premiums on United States bonds, bonds, securities, etc., banking house, furniture and fixtures, other real estate, cash items. Show the total amount of surplus and profits less taxes, expenses, etc.

General Remarks as to Condition of Bank—Summarize matters to which special attention should be called. Include certificate relative to solvency, by-laws, management, and condition of books. Was a meeting had with the board of directors? Were all matters subject to criticism considered with them? What elements of danger are in the bank?⁷

⁷With acknowledgment to pamphlet on "Bank Accounting" issued by the American Institute of Banking.

CHAPTER XIII.

THE ESSENTIALS IN GRANTING CREDIT

THE NATURE AND FUNCTIONS OF CREDIT

Credit is the life-blood of business, one of the "essential elements" in banking and finance. Without it, the present high state of business would not have come to pass, nor could it long continue. Credit constructs railroads, opens mines, spans rivers, paves streets, improves farms, builds homes, moves the commerce of the country and wages war. "Credit," says Webster, "has done more a thousand times to enrich the nations than all the mines in the world."

Credit transfers large sums cheaply. It employs capital productively. It enlarges a man's earning powers, and through its use the lender and borrower meet to their mutual profit. Credit is a far better instrument of production than an equal quantity of coined money; for while money is an indispensable denominator of prices, and the medium of the smaller exchanges, credit is the instrument of larger exchanges, and larger production. Moreover, as an instrument, it is economically costless and not like money with a commodity value and expensive.

CREDIT IN ECONOMICS

In political economy, credit is power to borrow; the ability to command capital. As nature abhors a vacuum, so capital abhors idleness, and it rapidly and automatically seeks profitable employment. Where the credit system is highly developed, active and profitable demand for capital exists. Where credit is undeveloped, we shall find business still in a crude state, wages small, and finances generally in an unsatisfactory condition.

CREDIT IN LAW

In law, credit is the present right to a future payment; the right to demand something from some one at a stated

time. Thus, when a bill of goods is sold, the legal title passes to the buyer, and the seller simply holds the right to collect the equivalent at the time and place appointed. He can retake the goods only under certain conditions, and his principal right is one of settlement. He can sell this right and the holder in due course will have good title to this right of enforcement.

CREDIT IN BUSINESS

In banking and business, credit is the estimate of the ability and willingness of an individual, firm or corporation to meet their business engagements. This estimate was formerly based chiefly upon: (1) Reputation; (2) capital. But with the advent of the mercantile agency and the credit department, a more accurate and trustworthy basis of credit has been formed, thus: (a) A closer examination as to the character of the man and the business; (b) total net worth, the element of contingent liabilities being given due consideration; (c) other facts bearing upon the probability of the success or the failure of the enterprise.

The basis of all such credit is confidence. In fact, every modern financial system is built upon confidence, and our whole financial structure has become a system of credit clearings—a system of substituting the token of confidence for the payment in money. This confidence must not only assure that a man is willing, but is also able to meet his engagements; not only able, but also willing.¹

THE FIELD OF CREDIT BROAD

The field of credit is an inexhaustible one, and the last word has yet to be said. Like all other subjects, it has two sides—the theoretical and the practical. To apply the theory is as important, if not more so, than to understand it. Much has been said and written concerning credit in the abstract and much in the concrete, but the trouble has been that, as a rule, application has been made of broad rules and principles—so broad that their definite application has been difficult for the beginner to understand.

¹From the "Essentials in Granting Credit" by the author. Awarded the Cannon Prize, New York Chapter, American Institute of Banking, September, 1911.

Credit is no longer granted on mere personal acquaintance with the borrower and his business, but upon his statement of condition. The use of commercial paper as a bank

<u>INDIVIDUAL</u>		TO CITIZENS BANK OF BUFFALO	
Name _____			
Business _____		Location _____	
For the purpose of procuring credit from time to time, borrowing money and obtaining discounts from you, the undersigned declare the following to be an accurate, true and full statement of the financial condition of the undersigned on _____ _____ 191____, understanding that the officers of the bank in granting said credits rely upon the accuracy of this statement. If at any time the condition of the undersigned should be materially changed, notice will be given you immediately, in writing, stating the nature of such changed condition, and in the event of not doing so it shall be evidence that the condition is unchanged. If any judgment shall be entered against the undersigned or the undersigned should become financially embarrassed, all obligations of whatsoever name, kind or nature held by you from the undersigned shall, at your option, be and become due immediately, notwithstanding the date of payment as fixed by the obligation then held by you.			
RESOURCES			
PERSONAL			
Total value Personal Property,			
REAL ESTATE			
Total value of Real Estate.			
Total Assets,			
LIABILITIES			
Loans from Banks _____			
Loans from Friends _____			
Secured Loans _____			
Mortgages on Real Estate _____			
Current Accounts _____			
Bills Payable _____			
Other Obligations _____			
Total Liabilities,			
Total worth in and out of business,			
Have you PAST DUE indebtedness? _____ If so, designate item and the amount. Please list real estate in detail on other side.			

CREDIT STATEMENT—INDIVIDUALS

investment has become more common as its worth has become better known, so that to-day it forms a large part of the assets of our commercial banks.

To properly judge the quality of the paper, dependence must be placed on the statement, and it is necessary to analyze the statement of condition correctly. To do this requires experience. Here the theory is applied. And any bank man who expects to make safe loans must be able to judge a credit statement. It is not enough that the city correspondent recommends the paper—it, too, may be mistaken in its opinion, or biased in its judgment. Nor is it enough that other banks have found it satisfactory, important as this may be as corroborative of present opinion. The banker should be able to do this for himself.

CREDIT A SCIENCE

In so far as the principles of credit have been worked out, systematized, clearly expressed and carefully applied, the granting of credit may be said to be a science. While not so exact as some sciences, such as mathematics, yet the fundamental principles are now generally recognized in all credit circles. Thus, it is accepted that character, capacity and capital are necessarily present in some degree in every credit operation; and while the proportion may differ, yet they must exist. To ascertain if they exist and in a safe degree is the work of the credit man. To determine the degree and the consequent safety of the loan based upon such analysis is to grant sound credit; to misjudge the quality of the credit is to make unsound loans and invite loss.

CREDIT IS OLD

Credit is old—older perhaps than the instruments which represent credit. It is conceivable that primitive man trusted primitive man with goods, upon a promise to return or repay in kind or in value. The evidence would be parol and not documentary, but the element *credo*—to believe—was present nevertheless.

Credit instruments are of sufficient age to prove the antiquity of even the documents of credit, there being in existence at the present time perfectly preserved credit instruments dating back to 2500 B. C.²

²In the Metropolitan Museum of Art in New York will be found Babylonian promissory notes on clay tablets, dating back to 2500 B. C., in a perfect state of preservation.

CREDIT A FINE PIECE OF MECHANISM

Credit is a fine piece of mechanism. It works silently and smoothly most of the time; but when it is thrown out of gear, it disrupts the whole commercial structure. Ordinarily large sums are easily and cheaply transferred from place to place, country to country; enormous shipments of merchandise are bought and paid for, and the operations of trade and commerce move without a hitch; but once the credit system goes wrong, the whole fabric feels the shock.

In the collapse of the credit machine due to the present war, new problems confronted the business world. It was necessary to devise other ways and means to promote credit transfers. The credit instruments in the hands of travellers, which ordinarily were accepted as cash everywhere because of the smooth working of the credit machine, were practically worthless for ordinary purposes. Gold had to be sent abroad to redeem the instruments which, under normal conditions, transfers of credit would have accomplished. The established order of things had to give way to new ideas to meet new conditions. In this country new forms of bank-notes and clearing-house certificates appeared, based, not on gold, in whole or in part, but upon commercial paper. Thus credit was piled upon credit, to keep the wheels of industry from breaking down entirely. And it worked perfectly.

CREDIT A TRANSFER

Credit is a transfer—or rather it arises out of a transfer. All credit is based upon a transfer of property. Without the interchange of property credit cannot exist. I may trust a man, but for what? My trust is merely good opinion. It is a compliment to him, but of no use until I trust him with something. Then it takes tangible form and out of the transfer true credit arises. I trust him to return the article or the value at the appointed time, and I have given him credit. I have confidence in him, and this confidence expressed in a transfer is credit.

Credit depends upon an exchange and time. Something of value must be exchanged for a promise to pay at a time certain to arrive. If goods are sold for cash, no credit enters. Trust or confidence may arise as to the quality of the

goods, the weight or measure; but this is a different sort of credit than that we are dealing with. The payment must be deferred if the credit element is to enter.

FIRM		TO CITIZENS BANK OF BUFFALO	
Name (Firm style)			
Business			
Location		Branches	
For the purpose of procuring credit from time to time, borrowing money and obtaining discounts from you, the undersigned declare the following to be an accurate, true and full statement of the financial condition of the undersigned on 191....., understanding that the officers of the bank in granting said credits rely upon the accuracy of this statement. If at any time the condition of the undersigned should be materially changed, notice will be given you immediately, in writing, stating the nature of such changed condition, and in the event of not doing so it shall be evidence that the condition is unchanged. If any judgment shall be entered against the undersigned or the undersigned should become financially embarrassed, all obligations of whatsoever name, kind or nature held by you from the undersigned shall, at your option, be and become due immediately, notwithstanding the date of payment as fixed by the obligation then held by you.			
ASSETS		LIABILITIES	
Cash on hand Cash in Citizens Bank of Buffalo Cash in other Banks Bills Receivable from Customers, (good) Accounts Receivable from Customers, (good) Accounts and Bills Receivable, due from Partners Accounts and Bills Receivable, doubtful Merchandise finished (how valued) Merchandise unfinished (how valued) Raw material (how valued) Real Estate in fee belonging to Firm Real Estate in fee belonging to Partners individually Machinery and fixtures Buildings Other assets, and other interests, and of last composed	Bills Payable, for Merchandise Direct Loan from Citizens Bank of Buffalo Direct Loan from other Banks Bills Payable to others Bills Receivable, discounted Open Accounts, not due Open Accounts, past due Mortgage or Lien on Real Estate Chattel Mortgage or other Liens Money Deposited with us Confidential Loans from Friends or Relatives, (and from whom) Other liabilities and of last composed Total Liabilities Net Worth	TOTAL	
Please list real estate in detail on other side. Contingent Liability { Accommodations on Endorsements Guarantees on Bonds Accommodation Paper Outstanding Do you pledge, sell or otherwise dispose of any of your accounts receivable? If so, to what extent are any of the accounts in above statement so disposed of? General Partners Date and Expiration of Partnership When was Business Established Special Partners For what Period and Amount Worth of Partners outside of Items scheduled above Sales for year ending Average terms of sale Amount of rent paid per annum Date of trial balance Amounts charged off for depreciation and bad debts Amount of Insurance: On Stock Machinery and Fixtures Building Are accounts insured, and if so, in what Company?			

(OVER)

CREDIT STATEMENT—FIRM

In the eyes of the law a contract is a sacred thing. It surrounds a promise with all its powerful legal machinery, to protect the rights and enforce the liabilities of the parties.

And credit instruments being contracts, find the strong arm of the law raised in their behalf, to enforce them according to their terms.

CREDIT A LAWFUL RIGHT

Credit is a lawful right. If I have a negotiable instrument payable to me, I can sell this instrument, and thereby transfer my right to receive payment to another. This is called negotiation. And the element of transfer by indorsement, negotiability. If I sell a man a bill of goods on open account, I can sell this account, and vest in the buyer all my rights to collect from the debtor. In some cases the indorsee of a negotiable instrument will have better rights than the original party. Anything which I own I can sell. Credit, therefore, is bought and sold like other commodities because of its standing in law.

CREDIT IS CAPITAL

Credit is power to borrow. And the power to borrow is capital; therefore, credit is capital. It is reasonable to conclude that if I have \$10,000 in cash and can borrow \$30,000 more, the \$30,000 is as effective for capital purposes as if it were all my own, except that the loan might be called at a time when not convenient to repay; but when employed it is capital in my hands. The industries of the world are carried on through borrowed capital—capital assembled in private hands and in banks, and then loaned to those who can best employ the assembled funds. And when in the bank the credit which the owner transfers to the bank becomes loanable in larger proportion, so that banking credit becomes capital to those who can offer necessary proof of character, capacity and capital to employ the credit profitably.³

³There is some dispute as to whether credit is or is not capital. It is at least equivalent, in its effect, to capital. While it may not increase the amount of capital, it transfers capital from one having idle funds to one who can use them at a price. It makes unproductive capital productive. And in the acceptance form of credit, it does not even involve the use of funds, nor does the capital fund need to be in existence when the credit is extended. Acceptance credit involves pure credit, and capital only remotely, and when so used, is capital.

CREDIT AN ASSET

Credit is an asset. If I have a promise which I am reasonably sure of being fulfilled, I may contract other prom-

CORPORATION		TO CITIZENS BANK OF BUFFALO				
<i>Name (Corporate style under charter)</i>						
<i>Business</i>						
<i>Location</i>			<i>Branches</i>			
For the purpose of procuring credit from time to time, borrowing money and obtaining discounts from you, the undersigned declares the following to be an accurate, true and full statement of the financial condition of the undersigned on						
191, understanding that the officers of the bank in granting said credits rely upon the accuracy of this statement.						
If at any time the condition of the undersigned should be materially changed, notice will be given you immediately, in writing, stating the nature of such changed condition, and in the event of not doing so it shall be evidence that the condition is unchanged.						
If any judgment shall be entered against the undersigned or the undersigned should become financially embarrassed, all obligations of whatsoever name, kind or nature held by you from the undersigned shall, at your option, be and become due immediately, notwithstanding the date of payment as fixed by the obligation then held by you.						
ASSETS			LIABILITIES			
Cash on hand			Bills Payable, for Merchandise			
Cash in Citizens Bank of Buffalo			Direct Loan from Citizens Bank of Buffalo			
Cash in other Banks			Direct Loan from other Banks			
Bills Receivable from Customers, (good)			Bills Payable to others			
Accounts Receivable from Customers, (good)			Bills Receivable, discounted			
Accounts and Bills Receivable, due from Officers			Open Accounts, not due			
Accounts and Bills Receivable, doubtful			Open Accounts, past due			
Merchandise finished (how valued)			Mortgage or Lien on Real Estate			
Merchandise unfinished (how valued)			Chattel Mortgage or other Liens			
Raw material (how valued)			Bonded Debt			
Real Estate in name of Corporation (Market Value)			Interest Due on Bonded Debt			
Machinery and fixtures			Money Deposited with us			
Balance due for stock subscription			Total liabilities and what charged }			
Treasury stock						
Treasury bonds						
Good will and patents						
Other assets, and what charged }						
TOTAL			Total Liabilities			
			Capital			
			Surplus, including undivided profits			
			TOTAL			
Contingent Liability { Accommodations on Endorsements Guarantees on Bonds Accommodation Paper Outstanding						
Sales for year ending			Average terms of sale			
Amount of rent paid per annum			Are accounts insured, and if so, in what Company?			
Do you pledge, sell or otherwise dispose of any of your accounts receivable?						
If so, to what extent are any of the accounts in above statement so disposed of?						
PLEASE GIVE PARTICULARS OF EACH PARCEL OF REAL ESTATE OWNED BY CORPORATION.						
Description	Street and Number	City or Town and State	Title in Name of	Estimated Value	Mortgages	Equity

CREDIT STATEMENT—CORPORATION

ises on the strength of receiving that which is due to me, in time to pay that which I owe. And in that confidence business moves. It is, when smoothly running, as effective to

keep the wheels of commerce moving as gold; and its cost is cheaper. One dollar of credit will do the work of four in money, and do it just as well. It is intangible, yet tangible. It cannot be seen, yet is powerful. Like electricity, its force may be seen by its effectiveness. It is the "silent partner" of business.

CREDIT IS REPUTATION

Credit is reputation. A man may have a very good name and yet have no credit, for credit is due to business character. And business character is simply reputation for promptness, square dealing, efficiency. It is not moral character, however important that may be; for some men whose moral character is undoubtedly bad may have a high sense of business honesty and build up an enviable reputation in business circles. And on the contrary, a man may be ever so good, say long prayers and be however devout, and yet have no business reputation and, therefore, no credit.

CREDIT IS WILLINGNESS

Credit is willingness to pay as agreed. It matters not how able a man may be, if he is not willing, he can circumvent the law. He must have a desire to be honest, a willingness to be fair, a high regard for business ethics. The willing man will usually find a way or make one. It is vital that this element be in evidence in all credit transactions.

CREDIT IS ABILITY

Credit is ability. Incompetency is the rock upon which many a business goes to ruin. It matters not how honest a man may be, if he lacks ability, he cannot succeed. He must "know how." The knowing how may be an inherent knowledge, or it may be acquired. It may be a knack, or it may be an accomplishment; but the "know how" must be there, if the venture is to succeed. Many a business built up by long years of faithful work has been left in prime condition to a family only to be wrecked because the father's ability did not descend to the son, and the son could not see that it was necessary to develop ability or to buy it.

CREDIT IS RESOURCES

Credit is resources. It is axiomatic that if a man would pay, he must have the wherewithal. He cannot pay a promise with a promise—not for long; and unless back of the

Incorporated under Laws of		Date	Commenced business
Authorized Capital	Par value of shares	subscribed	Paid in
How paid in, Cash		Other property	
Description of other property, and how valued			
What portion of real estate, if any, has been acquired through bad debts			
In whose name is title to real estate held		Any mortgage against it	
Are stockholders liable beyond amount paid on stock		If so, to what extent	
Average annual business	Annual expenses	Annual dividends	
When was last dividend declared	Rate		on buildings
Insurance carried on merchandise			
on machinery and fixtures			
Any mortgage on real estate, or other assets (give particulars)			
Bond issue		when due	Rate of interest
Regular time of taking inventory			
Give basis of this statement, whether inventory or estimate			
What amount of accounts and bills receivable not charged off, is past due, extended or renewed			
Amount charged off for bad debts last year		Amount collected on bad debts during same period	
Do you charge off on plant annually		How much last year	
State last date of taking Trial Balance		How often taken	
Number of bank accounts and where kept			

OFFICERS NAMES IN FULL	ADDRESS	NUMBER OF PAGES FILED
President		
Vice-President		
Secretary		
Treasurer		

DIRECTORS NAMES IN FULL	ADDRESS	NUMBER OF PAGES FILED
.....		
.....		
.....		
.....		

Please sign Company's name here

Business

Address

By

Date signed

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DETAILS OF CORPORATE AFFAIRS FOR CREDIT PURPOSES—REVERSE OF PRECEDING FORM

promise and the promisor there is property that will turn itself into money in due course, sound credit cannot arise. This property need not be in land and buildings, machinery

and fixtures—some credit men prefer that it should not. It may be in rights to collect cash, merchandise, raw material and other forms of assets, but it must exist in some form, and that form preferably of quick convertibility, so that the debts which are of short duration may be met by credits of like duration, the one offsetting the other.

CREDIT IS CONFIDENCE

Whatever credit is, it arises out of confidence—belief—that the debt will be paid; confidence that the trust will be fulfilled. No man parts with property unless he expects to get its equivalent at the appointed time. Even in collateral loans the credit is extended first on the faith in the borrower's ability to pay the loan, and this failing, in the confidence that the security will sell for enough to reimburse the lender; so that it is confidence in both that underlies the credit. In fact, most of the credit, particularly banking credit, is based upon the latter proposition; for back of the greater part of banking credit is value in some form. It may be stocks and bonds, warehouse receipts, grain, real estate, merchandise, "receivables," specifically pledged or not, to secure the loan; but upon faith of ultimate redemption in money the loan is made.

In the granting of credit on open account, the confidence lies in the ability of the business to make money. And the likelihood of making money is based upon the condition of the business as expressed in cold facts. The ultimate security lies in the capital worth of the debtor, so that while credit is confidence, it is ultimately based upon value in some form. Just so soon as confidence in the property value is lost, credit is destroyed. Witness a war. As soon as the war clouds begin to gather, the people begin to curtail their credit—their confidence. They draw upon their bank accounts, preferring to hold metal to credit tokens. They are fearful that the credit token will not exchange for property, while money tokens will. They fear that the earning power of properties will be cut off, and with earning power goes interest and dividends. They therefore prefer certainty to credit, and the credit machine suffers.

But credit is fundamentally confidence. Where confidence is most fully developed, credit will be cheap; where

it is uncertain it is dear. When it is lost, credit is impossible.

THE PSYCHOLOGY OF CREDIT

Expressed in simplest language, credit is, therefore, the belief that men will keep their engagements. It is confidence that the promise will be fulfilled. It matters not whether the promise is one of a government to pay a million dollars, or that of a laborer to pay the grocery bill he runs at the local store, the credit is extended upon the belief that the debt will be paid.

The granting of credit is a psychological process—a mental gymnastic. From the facts submitted the credit man must determine the likelihood of the debt being paid. He weighs the pros and cons and makes his decision. He plays the rôle of the jurymen, whose duty is to seek the truth and apply the law to the particular state of facts.

He knows men. He knows business and business risks. He knows the customs of the trades. He knows the condition of trade and the condition of trades at a particular time. It may be, for instance, that he has an application for credit from a suit and cloak firm. He will know if styles have suddenly changed, leaving manufacturers stranded with an avalanche of cancelled orders. He will know that a backward season has hurt sales. He will know that collections in certain sections are slow; in others good. In one part of the country crops may be good and money will be plentiful and cheap; in another dear. Just now he must weigh the probabilities of a great war. The collapse of the world's credit machine is a new force for him to reckon with. He must be a seer—one who sees; a prophet—one who looks ahead. How he gets his information is the secret of the profession.

MENTAL PROCESSES

The credit man's risks are the outcome of his mental processes. He expresses his hopes and his fears by granting or withholding credit. He first gets his facts, then forms his conclusions, passes judgment and awaits the result.

He may be influenced by friendship, pity, family ties, hesitance to say "no"—fear. He may be inexperienced in the ways of men and a poor judge of human nature. He

may be reckless, or ambitious to build up a business or a bank, and extend credit to those unworthy. He may be a poor psychologist and prove a poor credit man; but whatever the result of his labors, every credit is the result of mental conclusions, either carefully or carelessly formed.

It may be mere hope that the borrower will pay; it may be knowledge that the borrower will, in all human probability, pay. And having come to the latter decision, he has done all that the occasion requires. If he has simply acted upon the former impulse, he has scarcely made a good beginning. And many a bank loan rests upon the insecure foundation of hope.

ALL MEN NOT HONEST

The mental exercise through which the lender goes before credit is extended may be simple or complex, scientific or careless, but follows one of four general lines:

(1) The belief that all men are honest, which isn't so. Any concern which extends accommodation upon the assumption that credit may be granted to all who ask, upon the broad proposition that the human race is imbued with inherent honesty and all men regard their word as good as their bond, and their debts sacred obligations to be met if humanly possible, will soon find its shelves empty, its bank account exhausted, and its books full. This, no doubt, is the reason for the many bankruptcies in the retail trades. The failures in general stores and dealers handling groceries, meats, fish, etc., amounted in number to over 4,300 in 1913 with liabilities of over \$28,000,000. Credit in such establishments can be extended on no other basis than faith; for even a near-scientific method is quite impossible.

Large mercantile houses and department stores, however, operate credit departments which make an investigation into the risk before opening a credit with a customer; but even this can go but little way to protect the creditor if the buyer is dishonest. And even with the utmost care and good judgment errors will be made and losses sustained. But in the smaller establishments credit is based upon personal knowledge, often more or less casual, and the hope that the buyer is honest.

Frequently payment is made promptly for a time in or-

der to establish credit relations, and gradually the account is built up until it assumes dangerous proportions and loss results. The retail grocers are subject to this experience most of all. Weekly or monthly bills are contracted and promptly met for a time. Then part of the amount due is paid, buying still continuing, small payments being made,

Guaranty Trust Company of New York
COMPARISON OF STATEMENTS

ASSETS											
Cash on Hand and on Deposit											
Notes Receivable											
Accounts Receivable											
Merchandise											
Machinery and Fixtures											
Real Estate and Buildings											
Investments											
Prepaid Expenses											
Miscellaneous											
TOTAL											
LIABILITIES											
Notes Payable											
Accounts Payable											
Monies on Deposit with us											
Accrued Liabilities											
Dividends											
Miscellaneous											
Mortgages on Real Estate											
Bonds											
Total Liabilities											
Net Worth											
Capital											
Surplus											
Reserves											
TOTAL											
TOTAL QUICK ASSETS											
LIABILITIES											
EXCESS—QUICK											
Annuitants											
Contingent Liability											

COMPARISON OF STATEMENTS

until the debt grows larger instead of smaller, and often the debtor moves to parts unknown, leaving the dealer's profit, and sometimes his capital, on his books as a worthless account receivable.

There is now a movement to register all customers of grocers, so that a blacklist may be kept of all bad risks, and reported to the trade in general as a protection against

abuses. Credit that is extended upon such grounds is not only unsound, but highly dangerous—quicksand to engulf the unwary.

Bank credit is often granted on the same principle. The bank man knows, or thinks he knows, his borrower. He deems him honest. He takes his note, renews it from time to time, worries over it, endeavors to get it reduced, or get an indorser; but after renewing until hope is lost, charges it off. But all credit granted upon such belief is costly, whether in banking or mercantile life, and is rapidly giving way, particularly in banking and large enterprises, to more scientific methods.

TWO MEN BETTER THAN ONE

(2) The belief that if one does not pay, another will; therefore to the credit of the borrower is added that of another person, either upon indorsement or guaranty. This is more often used in banking than in other lines, it being frequently required that there shall be more than one party to the credit—"two-name paper." In European practice this is quite the general rule, credit instruments carrying at least two names being necessary to obtain the rediscount privileges of the central banks. But in smaller transactions it would be impossible to obtain this safeguard, the small debtor finding it difficult to obtain a guarantor of his debt, although in the coöperative credit systems of Europe this form of credit is most common; but this is due to the close association of years, family descent and personal contact that warrants risks of this kind.

PAST PERFORMANCES

(3) The belief that having paid in the past, the borrower will continue to pay in the future. The credit of the borrower may be ascertained from his "past performances." This may take on the character of close investigation into previous business dealings, or it may be based upon personal knowledge of the debtor's record. Thus, a country grocery may change hands. The previous owner may place in the hands of the new proprietor a list of all customers known to be good pay. They have paid him regularly; they

doubtless will continue to pay regularly. They may be trusted. Other customers may be trusted to limited amounts; some not at all.

In the retail trades the inquiry often takes the form of an investigation into the applicant's promptness in paying among dealers with whom he has carried an account. It may be an inquiry of the butcher, the tailor, the grocer; or it may be ascertained from a classified list compiled by commercial agencies giving the experiences of such dealers; or it may be a special report, carefully gathered.

In banking the inquiry assumes the form of an investigation by a bank buying commercial paper, to ascertain if all such debts have been promptly met in the past, by correspondence among banks that have held such paper, and their opinion of the paper; or it may be an investigation by a bank or mercantile house as to the promptness with which the debtor has met his bills. If he has taken his trade discounts it is a sure indication of good management. His reputation with the trade is important.

PROPERTY AND PROPERTY RIGHTS

(4) Belief that the borrower has property or property rights sufficient to warrant the risk and assure payment. Credit is extended largely upon the debtor's financial condition. This, too, may be elementary, and consist merely of the knowledge that the debtor owns a house and lot, or a business, or other property, which warrants the conclusion that he will pay because he has the means. Or, it may be the result of more careful methods, such as an inquiry into his financial affairs which finds expression in a statement of condition which, if honest and conservative, will reveal his financial standing.

COLLATERAL LOANS NOT ESSENTIALLY CREDIT TRANSACTIONS

A loan based upon collateral is not in the true sense a credit; for in the last analysis the advance is not made on the credit of the borrower, but upon the value of the property pledged as security. The mental process which obtains in such a transaction is not such as precedes the granting of

an open credit; for the creditor says to himself: "I have property worth so much, under my control, belonging to my debtor. I think he will pay; I hope he will—but if he doesn't, I have enough of his property pledged to me to reimburse me, even though it declines in value." This is particularly true in mortgage and collateral loans.

Upon these simple thought processes all credit operations rest. And the quality of the credit depends upon the degree in which these principles exist in a given transaction. But they are capable of infinite expansion and of manifold combinations so that no two credit risks are exactly alike, and general rules must be applied in the light of the business under test.

It is as difficult to apply abstract rules in credit as to apply abstract rules in mathematics. But if the rule is explained by applying it to a problem, clearness follows, and the student grasps the theory by having it applied. It is so in law, or any other department of learning. It is so in credit.

PERSONAL CREDIT

By the term personal credit is meant credit based upon persons as distinguished from credit based upon property. Many who apply for credit, and are perfectly good risks, have nothing but themselves to offer as security, their property being of little or no consequence as collateral. To the essential element of honesty, there must, however, be added the security of an assured earning power.

It is an obvious truth that if a man would pay, he must have the funds in hand or in expectancy. His honesty may be above criticism, his record unblemished, and yet if he has no income, his credit cannot be safe. And his credit is safe only in proportion to his income. This is the reason so many professional men are poor credit risks. Their income, while in a measure sure, is small, and frequently, as in the case of some ministers and lawyers, spasmodic.

All those who appear before the public must maintain an appearance of neatness, if not prosperity. It is their misfortune and not their fault. They often use their credit to bolster up appearances and the creditor suffers. A man earning fifty dollars a month is most assuredly not a good

CORPORATION

FOR THE PURPOSE OF PROCURING CREDIT FROM TIME TO TIME WITH YOU FOR OUR NEGOTIABLE PAPER OR OTHERWISE, WE FURNISH THE FOLLOWING AS A TRUE AND ACCURATE STATEMENT OF OUR FINANCIAL CONDITION ON _____, 19____. WE AGREE TO AND WILL NOTIFY YOU IMMEDIATELY IN WRITING OF ANY MATERIAL—UNFAVORABLE CHANGE IN OUR FINANCIAL CONDITION, AND IN THE ABSENCE OF SUCH NOTICE OR OF A NEW AND FULL WRITTEN STATEMENT THIS MAY BE CONSIDERED AS A CONTINUING STATEMENT AND SUBSTANTIALLY CORRECT; AND IT IS HEREBY EXPRESSLY AGREED THAT UPON APPLICATION FOR FURTHER CREDIT, THIS STATEMENT SHALL HAVE THE SAME FORCE AND EFFECT AS IF DELIVERED AS AN ORIGINAL STATEMENT OF OUR FINANCIAL CONDITION AT THE TIME WHEN FURTHER CREDIT IS REQUESTED.

ASSETS		LIABILITIES	
CASH		NOTES PAYABLE	
BILLS RECEIVABLE (NET)		ACCOUNTS PAYABLE	
ACCOUNTS RECEIVABLE (NET)		DEPOSITS	
MERCHANDISE		BONDED DEBT	
LAND		MORTGAGES	
BUILDINGS		ACCRUED LIABILITIES	
MACHINERY—FIXTURES		TOTAL	
		CAPITAL	
		SURPLUS—PROFITS	
		RESERVES	
TOTAL		TOTAL	

CONTRACT LIABILITIES. ON BILLS RECEIVABLE DISCOUNTED _____ OTHER _____
CASH, ON HAND AND IN BANK, \$ _____ NAMES OF BANKS _____
BILLS RECEIVABLE, ANY OVERDUE OR DOUBTFUL _____ ANY FROM OFFICERS, DIRECTORS, SUB-COMPANIES OR SIMILAR SOURCES?
ACCOUNTS RECEIVABLE, STATE AMOUNT DOUBTFUL, NOT FROM CUSTOMERS OR IN ANY WAY NOT REALIZABLE WITHIN IMMEDIATE FUTURE _____
MERCHANDISE, FINISHED _____ UNFINISHED _____ RAW _____ VALUED AT COST OR MARKET? _____ IS ALL SALABLE?
LAND, DESCRIBE BRIEFLY _____ ASSESSED VALUE _____ MARKET VALUE _____
BUILDINGS, COST \$ _____ AGE _____ DEPRECIATION _____
MACHINERY AND FIXTURES, COST \$ _____ DEPRECIATION _____ CONDITION _____
OTHER ASSETS, _____ ARE ANY OF ASSETS UNAVAILABLE FOR PAYING DEBTS? _____ LOSSES _____
INSURANCE, STATE KIND AND AMOUNT _____
NOTES PAYABLE, TO OWN BANKS _____ THROUGH BROKERS _____ OTHERWISE _____
ACCOUNTS PAYABLE, TERMS OF PURCHASE? _____ DO YOU DISCOUNT AND ANTICIPATE? _____
DEPOSITS, TIME OR DEMAND? _____ FROM WHOM? _____ INTEREST _____
BONDED DEBT AND MORTGAGES, DUE ? _____ RATE _____ ON WHAT BASIS? A LIEU ? _____
ACCRUED LIABILITIES, ITEMIZE _____
CAPITAL, PREFERRED AUTHORIZED \$ _____ ISSUED \$ _____ DIVIDENDS _____ COMMON AUTHORIZED \$ _____ PAID \$ _____ DIVIDENDS _____
RESERVES, ITEMIZE _____
NET SALES
LAST FISCAL YEAR
COST OF SALES
GROSS PROFIT
INTEREST, TAXES, DEPRECIATION, ETC.
DIVIDENDS PAID
SURPLUS FOR YEAR
HAVE THE BOOKS BEEN AUDITED BY A CERTIFIED PUBLIC ACCOUNTANT? _____ IF SO, GIVE NAME OF FIRM AND DATE OF AUDIT.
CORPORATE NAME _____
DATE SIGNED _____ BY _____ (STATE OFFICER'S TITLE)
OFFICE ADDRESS _____ NATURE OF BUSINESS _____
LOCATION OF PLANTS AND BRANCH OFFICES _____
OFFICERS _____ DIRECTORS _____
PRESIDENT _____
VICE-PRESIDENT _____
TREASURER _____
SECRETARY _____

STANDARD FORM OF CREDIT STATEMENT FOR CORPORATIONS ADOPTED BY AMERICAN BANKERS ASSOCIATION AND NEW YORK STATE BANKERS ASSOCIATION

risk for a hundred-dollar debt due in thirty days. He might be a good risk for a hundred dollars' worth of furniture on three dollars or less a week; but his earning power absolutely negatives the idea of being able to meet a large bill in a short period and no sane man would take the risk. Installment houses gauge the amount of goods they will sell a man largely by his income.

PERSONAL CREDIT DISTINGUISHED

Individual credit consists of two varieties, secured and unsecured. Under the first head come all sorts of goods sold on the partial payment plan, such as pianos, sewing machines, household goods of every description, phonographs, books, jewelry and clothing. Sales to merchants are delivery trucks, scales, typewriters, cash registers, etc. The security lies in the vendor's lien, as evidenced by a conditional bill of sale or chattel mortgage. In the former case, title to the property does not vest in the buyer until the last payment is made and recovery of the goods is a simple matter; but in the chattel mortgage, title passes upon consummation of the sale and the mortgage lien follows. To collect by lawful recourse means foreclosure—a slow and costly process. The security is in the goods more than in the person, as important as the latter element may be.

Enormous quantities of goods are sold on this plan, many flourishing businesses being built up by the long term of credit extended and the easy terms allowed.⁴ The risk lies in the fact that the goods may be used or misused for a time and returned, or carried away secretly so that following them is expensive; but the increased sales and large profits offset such losses. Moreover, the prices are much higher than for cash, it being not uncommon for installment houses selling furniture to mark the goods at from two to three hundred per cent. profit; and for very good reasons. Good houses, however, endeavor to obtain as large an initial deposit as possible, so that the buyer's equity will be large and default, therefore, expensive to him. Completion of the contract is desirable to both seller and buyer.

Secondly, the unsecured credit, which is based solely upon the borrower's promise and the seller's expectancy that he will pay. To illustrate: Many school teachers, policemen, firemen, municipal employees, clerks, clergymen, and others, maintain charge accounts at the retail stores. The reason for this will be noted below. They have no real property, as a rule, and frequently but little personal. And yet they are generally regarded as good credit risks, on the strength of their "job." The only security, aside from their honesty

⁴One installment house in New York does a yearly business of over \$2,000,000 in one branch, and has 20,000 open accounts.

THE GRANTING OF PERSONAL CREDIT

In the granting of personal credit two things are necessary to determine: First, that the applicant is honest and well regarded by those in position to know; and, secondly, that he has the funds, in anticipation, at least, to meet the debt as it falls due. He has "discounted the future"—will the future bear discounting? These are the questions to determine.

The starting point lies in the application. This preferably is an envelope of good quality, so that the information may be filed therein, with the original data written on the outside. Too much cannot be known about the applicant. The problem is to get it diplomatically, and correctly, and without offense to the delicacy that attends the asking for credit, particularly personal credit.

The application includes: First, the full name of both husband and wife. Most of the credits in retailing are opened by the wife who does the shopping, and generally in her own name. (It is estimated that fully eighty per cent. of personal credit is with women.) But the husband being the bread-winner is the important element to consider. Next, the residence and how long there. Long tenancy is a good omen. "Movers" are not, as a rule, desirable, either as tenants or as credit risks. Husband's occupation and how long employed in present and past positions. References come next. These are usually two in number, and are preferably those who have dealt in a business way with the applicant, and especially on credit.

REFERENCES

Bank references are most satisfactory, and are attended with no embarrassment to the applicant. But it is surprising how many who have bank accounts buy furniture on the installment plan, as an easy way of saving (?) money; or, to speak correctly, an easy way of paying for such articles, frequently unnecessary. Savings banks, as a rule, do not give references without explicit order from the depositor, and such references are not usually satisfactory, while banks of discount are, as a rule, glad to extend the courtesy, but without obligation on their part.

It is interesting to note that many who have gone through life on the pay-as-you-go-or-don't-go basis, find it embarrassing, to say the least, to give references when applying for credit.

Only personal friends can be used as references in such cases, and many a proud spirit rebels at letting even their closest associates into their personal secrets. Diplomacy is a fine art here, and many a sale has been lost because a delicate situation was badly handled.

PERSONAL CREDIT RATINGS

Having the application as a starting point, the investigation follows. The first step is to look up the applicant in the credit rating books. These are compilations made from careful investigations by credit reporting companies, giving the experiences of those who have sold the parties named therein. By a system of letters or figures these experiences are summarized, as, for instance: "John Smith, 402 West Seventy-second street, PPP," means that three dealers have sold to John Smith and found him satisfactory and prompt in his payments. If more detail is wanted a special report can be obtained for a small fee, and this goes quite extensively into the applicant's record.

The attempt to classify and rate personal credit risks is to be encouraged. At best it is not absolutely accurate; but working upon the theory that having paid one merchant the buyer will pay another, some degree of safety may be obtained. Blacklists have been made out, and experiences exchanged, which when made with care are a safeguard not to be despised in the granting of personal credit.

Next, the references are written to, the letter being couched in such terms as to hide the real reason for the request except that it is an inquiry into the person's habits and general financial situation. Next comes the "neighborhood" inquiry. This usually consists of a personal investigation, looking into the person's desirability as a tenant, a neighbor, a boarder, etc. Nearby stores are frequently visited to ascertain if the party trades with them and if so upon what basis and with what results. All this is done as by an amateur detective, so that embarrassment does not follow. Lastly, but in many cases, first, comes the verification of the

business connection. This is often done so cleverly that the applicant himself is interviewed without knowing the object of the visit, and many credits are opened on this test alone.

Many applicants for credit do not want their superiors to know of their condition, while others do not care. Length of service counts for much and some credit men will pass an application upon the strength of long employment in one place, and well they might. Where the applicant is a public officer, whose habits are well known, and whose compensation is a matter of record, no other investigation need follow. For instance, in New York a list is published of all municipal employees and school teachers, so that such information is easy to obtain. This, too, is often deemed sufficient to open a credit.

INDIVIDUAL CREDIT VS. MERCANTILE CREDIT

Individual credit is to be distinguished from mercantile credit. While individual credit is credit extended by a business concern to an individual as such, mercantile credit is the credit extended by one business house to another as such. The credit which John Smith the individual seeks for his household purposes differs from that which he seeks as a trader. The one is consumptive credit; the other trading credit.

The same process which obtains in the granting of personal credit takes place in extending mercantile credit, in its essentials, but has surer grounds upon which to work, and usually has property as a basic element. Honesty, business sagacity and a good record among the trade are as essential in mercantile credit as the qualifications mentioned above are essential in personal credit.

In the place of the references above indicated, we have the trade references. In the place of the neighborhood inquiry, we have the banking and mercantile inquiry, seeking to discover how the borrower has conducted his affairs in the past. And lastly, in the place of earning power as an individual we have earning power as a trader, and this is evidenced by his statement which reveals his present condition, and in comparison with previous statements and profit and loss accounts indicates the profitability of the business.

Individual credit has well been called consumptive credit; for the credit is used, as a rule, in order to satisfy present needs from future income. Retail credit is quite general

QUESTIONNAIRE

ASSETS

CASH—HOW MANY BANK ACCOUNTS? _____

BILLS RECEIVABLE (NET) _____

ANY EXCEPT FOR MERCHANDISE SALES? _____ ANY DISCOUNTED? _____

ACCOUNTS RECEIVABLE (NET) _____

ALL FROM CUSTOMERS AND GOOD? _____

MERCHANDISE _____

WHAT IS ITS CONDITION? _____ ANY OLD OR UNSALABLE? _____

REAL ESTATE AND BUILDINGS _____

CONDITION OF STORE OR PLANT _____

OTHER ASSETS _____

IS THERE ANY LIEN ON SO-CALLED QUICK ASSETS? _____

LIABILITIES

NOTES PAYABLE _____

DO YOU USE BROKERS AND AT SAME TIME BORROW FROM YOUR BANKS? _____

ACCOUNTS PAYABLE _____

DO YOU DISCOUNT ALL YOUR BILLS? _____ DO YOU ANTICIPATE? _____

DEPOSITS _____

ARE THEY ON TIME OR DEMAND? _____ FROM WHOM? _____

BONDED DEBT AND MORTGAGES _____

HOW SECURED? _____ ANY CHATTEL MORTGAGES OUTSTANDING? _____

OTHER LIABILITIES—CONTINGENT OR OTHERWISE? _____

MISCELLANEOUS

CAPITAL _____

PREFERRED _____ COMMON _____ DIVIDENDS _____

NET WORTH _____

ANY OUTSIDE INTERESTS OF FIRM OR MEMBERS? _____

RESERVES _____

DESCRIBE _____

INSURANCE _____

DESCRIBE _____

SALES (NET) TO PUBLIC _____

GAIN FOR YEAR AFTER PAYING ALL EXPENSES, INCLUDING DIVIDENDS OR WITHDRAWALS _____

BOOKS EXAMINED BY CERTIFIED PUBLIC ACCOUNTANT? _____

NATURE OF BUSINESS _____

THIS QUESTIONNAIRE IS TO BE USED BY BANK OFFICERS OR HEADS OF CREDIT DEPARTMENTS IN DISCUSSING STATEMENTS HANDED IN BY THE MAKERS—IN EXAMINING STATEMENTS BANK OFFICERS CAN CHECK OFF THOSE POINTS WHICH THEY WISH INVESTIGATED FURTHER BY THE CREDIT DEPARTMENT—THIS SHOULD BE USED WITH A CARBON, THUS GIVING A DUPLICATE RECORD

for the necessities of life and sometimes the luxuries. It is not based upon an exchange of goods. It does not bridge the time from one process to another, but is extended that present wants may be purchased upon expectancy. It is an annuity working backwards.

Commercial or mercantile credit, however, has production in mind. It "carries" a business transaction. It fills the void between purchase and sale. It gives the buyer time to turn the goods into money before he pays for them. It gives the manufacturer time to turn raw material into finished products before payment is due. It provides working capital. It is productive credit, and the whole process of production, transportation and distribution is based upon it.

THE CHARGE ACCOUNT

To distinguish again by example, let us take a typical illustration of an application for personal credit. A school teacher, for instance, applies to a department store for a monthly charge account. The reasons may be few or many. She may be short of funds and trading upon her expected salary. She may prefer to shop on a charge account because it eliminates the carrying of money and simplifies the return of goods. She may like the prestige a charge account gives her. She may have been solicited to open such an account. She buys, not to sell again, but to consume. Not a single purchase is for reselling, but for the satisfaction of her wants. Proving satisfactory upon investigation as to her position and personal habits, she gets the credit.

But John Smith, the merchant, buys to sell again. He has property. He has a record; he has a reputation. His affairs are easily checked. He makes a statement of condition, which if wilfully wrong is a felony. We find that for every dollar he owes he has one, two, or two and a half in hand or due him. We can have an audit.

We can with a fair degree of accuracy judge our risk, and know that by the extension of the credit he will make a profit and we will make a customer. We base one credit solely upon the person; the other, in a very large measure, upon the property. In the former we expect to find but one (perhaps two) of the "big C's of credit"—(Character, Capacity and Capital)—namely, character. In the latter,

we must have all in some degree, and preferably all in a large degree. But the capital element is generally entirely lacking in personal credit, while an essential element in trading credit. Lack of capital is responsible for more failures than any single cause.

THE GROWTH OF PERSONAL CREDIT

The growth of individual credit may be ascribed to three causes: (a) The desire to extend business. Many concerns catering to the retail trade encourage charge accounts and carry thousands of them on their books, knowing full well that credit accommodations lead to over-buying. Well-rated people are constantly solicited to open such accounts; and not knowing how their names are secured, take it as a compliment and are flattered thereby. (b) The fear of offending customers by refusing credit. This is particularly true in very small establishments, where to refuse the request to "charge it" would lead to loss of custom. Moreover, it is harder to refuse a small credit than a bank loan. One is strictly personal in its setting, while the other may be referred to that impersonal "discount committee" which exists often in name only, but is a good bumper between the official and the applicant. (c) The all-too-prevalent tendency to live beyond one's means, making it necessary to live on expectancies rather than realities.

Personal credit is often used to bolster up a tottering man. It is used to create impression. Credit men could tell tale after tale of charge accounts abused, and installment buying resorted to by those who would ordinarily disdain such a transaction, for no other reason than to make an appearance. The credit that wrecks business in New York is not Third Avenue credit, but Fifth Avenue and Riverside Drive credit. Third Avenue may have a certain kind of credit (usually the dollar-a-week credit), while Riverside Drive has credit (or gets it) and rarely thinks of paying cash. A Fifth Avenue tailor told the writer recently that his accounts run from two to four years, and "a little cash now and then looks mighty good to him."

This abuse of personal credit is notorious among the rich, the idle rich, the would-be rich, or the was-rich. This condition may be due to the mental conclusion that because

they are good for their debts, they need not hurry to pay them; or it may be due to ignorance of what the tardiness costs them. The tailor above mentioned admitted that he got ample interest on his money by the long delay, the interest charge being concealed in the price of the garment. But were he given his choice, he would doubtless choose shorter credit and less profit.

The credit man of one of the large department stores that caters to Fifth Avenue trade states that Fifth Avenue pays as promptly as can be expected if proper credit methods are used. If the risks are selected and the credit machinery effective, no complaint will arise as to the desirability of the patronage of the wealthy. The tailor does not select his risks.

PERIOD OF PERSONAL CREDIT

The period for which individual credit is extended should coincide with the debtor's periods of income. In the case of the wage-earner, who receives his pay weekly, weekly credit would be justified, but prompt settlement should be demanded in order that the debt might not overlap into another period. Salaried men who are paid monthly may safely be carried for a month, but the same rule applies. Those whose earnings are dependent upon fees, which may be more or less uncertain or spasmodic, cannot in the nature of

NEW ACCOUNT.

		New Business..... ☒
		Check Desk..... ☒
		Cash Item Dept..... ☒
		Correspondence Dept..... ☒
		Remittance Dept..... ☒
FILE IN CREDIT BUREAU.		
Name <u>E. C. David Publishing Co.,</u>		
Business <u>Publishers of books</u>		
Address <u>Edin., Ill.</u>		
Date opened <u>9/10/05</u>	First Deposit <u>9/10/05</u>	Description of Deposit <u>Cash & N.Y. exch.</u>
Introduced by <u>Brown, Wood & Co</u>		
References <u>J. C. Bearf & King & Co</u>		
Succeeds a/c of <u>None</u>		
Remarks: <u>a/c to be fairly active.</u>		

things be in funds regularly, and credit in such cases is of longer duration than in the case where income is steady even though small.

The time element is a factor of no mean import in individual credits. The obligation of the merchant has a fixed maturity, if in the form of a note, and generally so, if in the form of a book account, especially with the system of cash discounts now so generally prevailing. He expects to meet his bill or his note at maturity. Not so, however, in personal credit. While the terms may be thirty or sixty days, this means nothing to the charge customer. He pays when convenient. Ask the average charge customer what are the terms of his credit, and when he pays his bills, and he will answer, if honest, "At my convenience"; and sometimes "Never!"

While in a measure personal credit is perhaps the most risky, yet on the broad assumption that the average man is honest, it need not be attended with undue dangers. It requires diplomacy, skill, knowledge of human nature, tact, courtesy, firmness. To get business; to hold it; to say "no" and do it kindly; to be liberal, yet safe; to select the good and discard the bad—all this falls to the lot of the personal credit man.

LOSSES IN PERSONAL CREDIT

The losses in personal credit must in the aggregate be enormous. The losses compiled by the agencies do not and cannot include those unrecorded losses suffered by retail merchants the country over. Thousands of small groceries, laundries and butchers accept these little, and sometimes big, losses as a matter of fact—a necessary evil in their business—and make the best of it, satisfied to make a living in spite of them. From the small corner grocery to the huge department store, whose losses are kept down by better methods, this evil appears, as an open sore, to be kept under some control, but not entirely healed. It is no wonder that the merchant thrives who sells for cash only. His profits, though small, are certain, and a dollar in the till is worth two on the books.

Lawyers cannot collect for their legal services; doctors for their professional calls; the latter being especially sub-

ject to this abuse, not to speak of those losses taken by individuals who loan their friends money, in the hope that payment will some time be made, and find they have mistaken a gift for a loan.

PERSONAL CREDIT THE FOUNDATION OF THE CREDIT SYSTEM

It is obvious that personal credit is the very foundation of the whole credit structure. If the retailer extends credit unwisely, so that his bills cannot be promptly met, the jobber or wholesaler cannot meet his. The manufacturer in turn cannot meet his, and the weakness extends to the whole system. If, on the other hand, the retailer extends credit only to those worthy and prompt (as all well regulated credit departments endeavor to do) or trades for cash, the next in line feels the stimulus, and so on through the whole course of trade.

Business cannot long be conducted on mere book account. While the account receivable is a simple and ordinarily a good credit instrument, prompt settlement is the very essence of sound business. Payment in some more desirable form of credit instrument must not be long delayed, for with the assets of business in form of accounts receivable the burden of carrying the credit becomes too great a strain upon banking capital, and bankruptcy ensues. Many a business has been wrecked upon the quicksand of personal credit.⁵ Whom to trust is the problem of all business. To get the money for goods sold is the function of the credit department as well as to decide who shall have goods on credit and upon what terms. And to collect money is as fine an art as to sell goods.

MERCANTILE CREDIT

In its economic sense mercantile credit is the power to secure goods for the purpose of exchange in return for a valuable consideration promised in the future. It is a sale of goods on time.⁶

⁵The accounts of a large department store in New York were scaled down twenty-five per cent. upon a careful audit—a very large shrinkage, due in the main to too liberal credit methods.

⁶Hagerty, "Mercantile Credit."

In a previous paragraph we have discussed productive credit and consumptive credit; and while personal credit is largely consumptive credit, mercantile credit is quite altogether trading credit—carrying credit.

Commercial credit and personal credit combined are like the piers of the Brooklyn Bridge—they carry the load. It must be sound, or the credit system collapses. Weakness in the credit methods of the retailer or the jobber carries weakness to all above him. Take the case of cotton. The farmer having pledged his crop to feed his hands and grow his crop, has expected to pay the merchant when he sold his cotton. He cannot sell. The merchant, not receiving his money, cannot pay his jobber. The jobber cannot pay the manufacturer, and he cannot pay his bank. And so, one is dependent upon the other, as current history demonstrates, and strength for one is strength for all; and weakness in one spells weakness for all.

BENEFITS OF COMMERCIAL CREDIT

The benefits of commercial credit are so well understood that the primary benefit only needs to be mentioned to suggest others, that is, the enhanced profit that follows the use of credit. For instance: A merchant has a capital of \$10,000 and borrows \$40,000. Suppose he makes a gross profit of ten per cent. on the capital employed, and has, therefore, \$5,000 as the result of his trading. He pays five per cent. on his borrowed capital, which reduces the profit to \$3,000. But if he had not borrowed, and used only his own capital at the same rate, he would have netted but \$1,000; therefore, by using the credit that rested upon his original capital reinforced by his ability and integrity, he has made \$2,000 as a reward for knowing how to employ banking credit.

BANK CREDIT RESTS UPON MERCANTILE CREDIT

The credit with which a bank deals consists in issuing bank notes, redeeming checks and certifications, meeting its acceptances and lending money. Its credit operations, however, would be largely impossible were it not for mercantile credit. The functions of note issue and deposit exist because of business dealings; and if there were no business

debts settled by negotiable paper the function of discount could not obtain. It is the function of the bank to carry the debts that business creates; and as these debts are sound, the banking operations based thereon are sound. This is the reason the Federal Reserve Board has been so particular that the bills offered for discount shall arise out of mercantile dealings—productive and consumptive processes, and not speculative. The basic principle laid down in their definition of November 10, 1914, was that the debt shall be self-

NOTING
Customer's
Name

C. H. Dixon

Dec 1, 1905

Answered Enquiry from

*Nat Bank of Republic,
Boston.*

See Letter Book 50 A. Folio 93

MEMO OF INQUIRY ANSWERED REGARDING CUSTOMER'S STANDING

liquidating, of short duration, to cover the time lapsing between one process and another, the longer time paper necessary for agricultural and stock-raising purposes being limited to twenty-five per cent. of the capital of the Reserve Bank paid in.

The power to create credit in banking rests to a considerable extent upon mercantile credit. The merchant takes a note to the bank, and gets it discounted. He does not want gold, or bank credit in the form of bank notes, but a credit on its books. The banker, therefore, places the amount to his credit and permits him to draw checks against it. On the asset side of the statement the banker has the obligation of the maker of the note, reinforced by the indorsement of

the one discounting; and as a liability he has the debt created by the above credit. On the soundness of the asset depends the soundness of the liability; for the banker's chance of receiving back the funds he disburses in paying the checks depends upon the goodness of the instrument in his leather portfolio.

BANK CREDIT SHOULD FACILITATE EXCHANGES

Theoretically, no advance of bank credit should be made in any form except to facilitate a socially productive exchange of wealth, the final payment for which is temporarily deferred. Bank credit is a medium of exchange whose existence is made possible by the assumption on the part of the bank of a corresponding liability to pay cash on demand. The nature of this liability precludes the use of bank credit for any but short periods of deferred payments and for any purposes except bona fide exchange transactions. It bridges the gap between the surrender of capital and the receipt of payment for it. Its purpose is to anticipate a credit already established rather than to create one anew.

Loans made simply to enable an owner of commodities to hold them for a rise do not grow out of exchange transactions. An additional medium of exchange is needed only when there are additional exchanges, and the holding of goods back from exchange reduces and does not add to the number of such exchanges. However profitable speculative and similar loans may be to those immediately concerned, they are not a safe basis for advances by note-issuing or reserve-holding banks.⁷

CHANNELS OF MERCANTILE CREDIT

The channels of mercantile credit are four: (a) Financing the raw material. The production of raw goods on the farm is carried on largely through private capital or personal credit, there being no goods to pledge except those in expectancy. The crop-lien system of the South is illustrative of this. The farmer having no funds to plant and fertilize his crop, secures credit by pledging his expected crop to the

⁷Eugene E. Agger, Columbia University, in "Journal of Political Economy."

banker, or most likely to the merchant, who advances the fertilizer, the food for the hands, and the implements, taking as security a mortgage on the crop. The wheat farmer may borrow on his note at the bank, with or without security, or likewise obtain credit at the merchant's; but the crop lien is peculiar to the South. The cattle-raiser may obtain a chattel loan with his cattle as security, and so on down the list, the producer pledging the thing he expects to raise, is raising, or hopes to raise, most frequently to a bank, as security for his advances.

From the producer the goods go to (b) the manufacturer, who turns them into finished products. But this is to a large extent (on the producer's end) a cash transaction, the bank making the advance on the goods when shipped. Raw material, wool, cotton, wheat, etc., moves on bills of exchange with bills of lading attached. These are sold to banks, one after another, until the goods reach the manufacturer, who not having capital enough to carry the raw articles, pledges them to a bank, takes them out of warehouse as needs require, and pays for the same from the sales of finished products.

(c) Next come the wholesalers, jobbers and middlemen, who find the retailer. These finance their transactions either by giving the manufacturer their notes, or by borrowing in the market and paying cash. The banks still carry the debt by buying the receivables, single-name paper, or by loans direct to the dealer.

(d) The retailers now come in to dispose of the goods to the final consumers, and herein comes largely the book account credit. Of course, this form of credit exists in many of the other processes, but in retailing especially. These accounts are frequently pledged to banks; single-name paper is sold largely on the strength thereof, so that the bank in the end carries the credit operation, and this is its proper function.

But in all these processes, the factor of commercial credit runs. If the mercantile credit is sound, the banking credit will be sound; and unsoundness in the one works havoc with the other. And in the line of descent, each factor has the means of ascertaining with considerable nicety the quality of the credit, except the retailer, and upon him rests the greatest risk.

Date..

To be made out at the close of business each day and sent to Credit Department

LIST OF BILLS PURCHASED AND LOANS MADE -FOR USE OF CREDIT DEPARTMENT

The tendency of the times is to eliminate the middleman, and sell from mill to retailer and cut out the additional profits that must be added to selling prices as more handling becomes necessary. For every process there must be a profit. If the manufacturer sells to the jobber in the large city, and he to the jobber in the small city, and he to the merchant, and he to the consumer, there must be the cost of many handlings and a profit for the capital that is necessary in the various transactions, together with remuneration for the proprietor.

BUYING AND SELLING WITHOUT CASH

Whatever the financial process, the bank intervenes and buys the credit instrument. It is possible to carry a cargo of cotton from planting to consumption by the use of mercantile credit reinforced by banking capital to buy the instruments. To illustrate: the cotton planter in the South has no money. He goes to the bank and gives his note, secured by a crop in expectancy. He might, as many now do, and as has been the custom in the past quite largely, go to the village storekeeper and get his seed and his plow and groceries for the hands and himself while the crop is maturing, turning in his cotton when harvested to pay his debt and carry him until planting time comes again; but in the end the bank will carry the burden, for the merchant will borrow of the bank to buy the goods that feed the farmer. The crop matures. It is gathered, ginned, baled and shipped, and the loan to the bank or merchant is cancelled.

In order to show further the practical uses of commercial credit, and the possibility of moving a consignment of goods from producer to consumer without the use of individual capital, and, in fact, without the use of money except in the open markets of Europe, it is proposed to trace such a transaction in detail. The incidental expenses such as freight and insurance, etc., must be paid for in cash; but the merchandise is paid for from money accumulations in the broad market.

Let us suppose that a Texas merchant becomes a cotton buyer. He has no adequate funds, and, therefore, arranges with his bank to honor checks given by him to various farmers for cotton purchases, the security to be the cotton placed

in warehouse and warehouse receipts lodged with the bank as security for the advances. As the checks are presented they are credited to the farmers' accounts.

The Texas buyer sells the cotton to a New York exporter. Draft for the amount is drawn, documents attached, and handed to the Texas bank for credit to the merchant's account, which pays his debt to the bank.

The Texas bank sends the draft to its New York correspondent for collection and credit.

The New York bank presents the draft to the exporter and is told that a like amount of cotton of the same grade has been sold to a Liverpool merchant and is ready to move. The exporter, therefore, makes payment by handing a draft with shipping documents, to the bank, which sells the draft and from the proceeds pays the Texas draft, by crediting the Texas bank with the amount.

In handling commodities which move by slow freight, and which are of standard grades, it is common practice to honor drafts against the same, which, of course, travel faster, by securing bank loans on the commodity, lodging the bills of lading as security for goods in transit, and warehouse receipts for goods in storage. When a quantity of goods is sold and is to be released, the bank would, of course, credit the shipper with the draft presented as an offset to his loan. If more margin should be required, it would be furnished by lodging additional bills of lading, even for goods not yet arrived. In the grain trade there is a constant shifting of bills of lading as goods move in and out of the merchant's possession; the idea being that the bank shall have a lien on the goods, irrespective of where they may be. It makes advances against goods coming in, and credits payments against goods moving out, the security in both cases being in its possession of the bills of lading.

The New York bank forwards the draft to a Liverpool bank which presents to the spinner. He accepts, the draft is sold in the market and proceeds credited to New York.

Having sold the cotton to a spinner on a sixty-days' draft, the cotton goes to the mill for manufacturing into cloth.

The cotton having been turned into cloth, is sold, let us assume, to a New York jobbing house. The goods go forward, draft is drawn on London, where an acceptance has

been arranged by the New York house. The draft is presented to the London bank, accepted and sold in the market, documents released and sent to New York. From the proceeds of this draft the spinner will meet his acceptance due in Liverpool. The goods are now in the jobber's hands, a note running to the New York bank to secure it for the acceptance, in the latter's possession.

The jobbing house has sold the goods to the same merchant in Texas who purchased the cotton from the farmers. The goods are shipped and payment made therefor, by note at sixty days, which the New York house lodges with the New York bank. On the strength of this note, the New York bank could remit, several days before the acceptance which it arranged with the London bank is due, an amount sufficient to take up the acceptance. But having credit with the Liverpool bank for the proceeds of the cotton draft, it sends a banker's draft for the amount and the transaction is closed.

The goods are sold to the farmers on thirty days' book credit. When the farmers pay their debts, they will draw checks on the bank to the order of the merchant, which the merchant will deposit to his account, and when his note is due, the New York bank which discounted the note will send it home for payment, and it will be charged to his account, and paid by New York draft against the balance of the Texas bank. From start to finish, therefore, the banking machinery here crudely outlined will have carried the debts as they passed from one stage to another.

Out of these operations in mercantile credit arise the instruments of banking credit, promissory notes, bills of exchange, drafts and book accounts. The mercantile world furnishes the transaction and the instrument; the banking world the cash for the foundation and the machinery for the credit operations. The evidence of one debt is the foundation for another. Thus the note of the merchant discounted by a bank affords the basis of the credit to the discounters' account, against which he checks; and is soon to afford the foundation for the issue of our currency, for by the Federal Reserve Act, Federal Reserve notes may be issued secured by paper eligible for rediscount, the Federal Reserve Bank carrying a reserve of forty per cent. in gold and 100 per cent. in commercial paper against notes so issued. The

debt of one country to another, of the bank to the depositors, and the bank to the public in general, rests in the last analysis upon the credit instrument which arises from the transaction between two dealers. Prendergast in "Credit and Its Uses" well says: "Commercial credit merges itself into banking credit by purely natural processes, which in turn assume the control of the commercial market in a universal sense."

CHANGING CONDITIONS IN MERCANTILE CREDIT

The changing conditions in mercantile credit are the outcome of the Civil War. Prior to that time the merchants bought on long-time credit, giving their notes. But the uncertainties of the value of the greenbacks led merchants to offer cash discounts for prompt payment, and in order to take these discounts, which are often liberal and highly profitable, the merchant now sells his paper through brokers and pays cash within the discount period. Thus we have the cash discount system and the single-name paper. The longest terms known to the writer on open account are in the textiles, where discounts are allowed as long as four months from date of invoice, and this frequently dated ahead.

The buyer no longer takes his semi-annual trips to market, being visited by travelling salesmen weekly, monthly or seasonally. Although, where it is a matter of style, buyers to a large extent still make their periodical trips to the large city to see the assortments. The mercantile agency has made it no longer necessary that the buyer and seller know each other personally. Some large houses sell by catalogue only and the personal equation never exists. Moreover, the cold analysis of the credit department, now a part of all large concerns, makes personal contact unnecessary to determine the risk, important as personal contact may be.

MERCANTILE CREDIT TERMS

The terms of mercantile credit should be on an economic basis. They should not be longer than is needed to turn the goods into the next process. The buyer should pay for his goods as soon as he has sold them; for in selling, an instru-

ment will arise that can be turned into money to liquidate the first debt. As wholesale groceries can be turned in from one to two months they should be paid for within that time and the credit term be no longer. The farmer needs longer time to turn soil chemicals into wheat and six months might not be too long for him. Retail groceries may be turned two or three times a month and meats two or three times a week, and, therefore, short credit arises; while dry goods would take longer, being less perishable but slower in selling, and subject to fashions. The cash discount is so firmly established that it is now a fixed policy, and this makes the credit term, as a rule, short. Banking credit is longer, has no premium on promptness, but a penalty on laxness.

INSTRUMENTS OF CREDIT IN MERCANTILE TRANSACTIONS

The credit instruments used in mercantile dealings are:

(a) Book accounts. It may seem superfluous to describe the book account as a credit instrument, but analyzed it simply means that the seller delivers the goods, charges the buyer on his ledger, renders invoice and statement, with terms of sale, collects at the end of the credit term, payment probably being made by check, and the transaction is closed. No circulating credit has arisen; and until recent years no pledgable security came out of the operation; it was strictly between the two. But the seller can now avail himself of the proceeds of the sale by hypothecating the book account as hereafter described.

The book account has no evidence on the part of the buyer that he agrees to the terms of the sale, except the account stated, which is passive and not active assent. In a negotiable instrument, however, the maker consents to the time, the amount of the credit, and agrees to pay it. The dishonor of a book credit is not so serious a matter as the dishonor of a promissory note. If the book account be paid a few days after its due date, it is quite satisfactory, and the cash discount often allowed; but to allow a note to run over even a day is to invite protest, and protest means discredit.

BOOK ACCOUNTS AS SECURITY

Book accounts—open credits, dealer with dealer—are presumed to be settled at the end of the credit term, but are not rigid in their maturity as are negotiable instruments. They are sometimes settled by note, as in lumber, raw silk, etc., but generally in cash, which is obtained from the sale of single-name paper. They are frequently used as the basis of credit, by pledging with bankers, factors and “commercial bankers,” who make a business of loaning on accounts receivable. So common is this practice that many firms have their bill-heads printed with the notation: “This bill assigned to and all payments must be made to them.” Large and important houses in New York and other cities now buy these book accounts, and make advances in part or up to the full amount, charging in proportion to the risk assumed and the amount advanced. A *del credere* commission man or factor is one who insures the credit he opens when he makes a sale of his principal’s goods, and guarantees the payment of the same, for which guaranty he receives a large fee and assumes greater risks. Some banks will loan on book accounts and others will not; but they are coming to be quite a common security.

The methods of utilizing book accounts as security are two: (a) Selling outright, the buyer assuming the risk of collection, for which risk he charges his full toll; (b) pledging the accounts as security, receiving only part of their value, the pledgor agreeing either to turn in others to keep the margin good, or to turn all proceeds over to the lender as payments are made. It has been held recently in New York that such an operation is in violation of the banking and corporation laws which forbid other institutions than banks doing a discounting business, and such a contract of sale is void.

The factor is in some cases a firm of considerable wealth, able to maintain a large organization, and employ a highly-paid credit man, and is able to borrow in the open market on single-name paper or by banking connections obtain the credit needed to carry on the discounting operations.

The selling of book accounts is liable to gross frauds, and it becomes needful that the account be confirmed over

the debtor's signature to be sure that the account is not a fictitious one.

ASSIGNED ACCOUNTS A MENACE

The growing practice of loaning on assigned accounts constitutes a constant menace to the banker whose advances are made on the general security of the assets, particularly those described as quick. The number of corporations organized for financing in this way is steadily increasing and the ease with which credit can be obtained is a constant temptation to the small borrower to overtrade. It has also

Business Loans. <i>Forty-five cents a line.</i> Manufacturers, wholesalers, outstanding accounts financed, notes discounted. Kutyn, 194 Bowery. (Bank Building.) Manufacturers' and wholesalers' outstanding accounts financed, notes purchased. Nassau Finance, 119 Nassau. Merchants and manufacturers' accounts notes, second mortgages. Victor Beaver 39 East 42d. Make loans outstanding accounts, notes, bank books. Security Finance Co., 149 Broadway
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ADVERTISEMENTS IN THE NEW YORK TIMES OF CONCERNS DISCOUNTING BOOK ACCOUNTS

given rise to a species of fraud which, unless promptly checked, will prove very dangerous for those who make such advances.

A New York manufacturing concern with a number of subsidiaries recently went into bankruptcy and the active official disappeared from his accustomed haunts. It soon developed that in addition to direct loans from banks he had been financing his enterprises by the sale of accounts to two large commission houses in New York City who make a specialty of cashing accounts. It is alleged that concern "A" would ship goods to "B" and pledge the invoice with the commission merchant. "B" would ship the goods to "C," make out a bill, go to the commission merchant and secure a loan on it. "C" would repeat the operation to "D"

⁸F. B. Snyder, Assistant Cashier First National Bank, Philadelphia, before Philadelphia Chapter, A. I. B.

and "D" to "E" and "E" to "A" until five advances had been made on the same lot of goods. The skilled financier was later found across the Mexican border where he had gone, as he said, for his health. His illness must have had a very deteriorating effect on his memory as he was traveling under a name entirely different from the one by which he was known in New York. Pledging accounts may serve as a useful purpose with certain classes of merchants who can thus obtain funds to discount their bills when their bank credit is not sufficiently good for single-name accommodation. The discounts, however, must be very substantial as the estimated cost of this method of borrowing is from seventeen to thirty-six per cent. Where it is indulged in the banking of the borrower should all be done with the institution making such advances and his financial affairs should at all times be the subject of the closest scrutiny.

DATING AHEAD

The dating ahead principle arose from the necessities of manufacture. In such lines as staples, small stocks may be carried, and bought as required: while in fashionable goods, they must be made to order and to suit the tastes of the buyer. Thus, in a line such as ladies' garments, samples are made up and taken out to the retailers for inspection, and orders taken months in advance of the season. Orders for spring goods are taken in the fall and vice versa. As soon as the goods are made up, they are delivered as per agreement, the invoice to be dated ahead. For instance, the goods would be delivered for the spring trade in January, the invoice to be dated as of March 1st, and the terms of credit would run from that time. Thus, a department store may have a sale of furs in August, agreeing that no payments are to be made until November 1. It must either carry the credit itself, or pass it back to the fur manufacturer. This it does by having the invoices dated as of November 1, the term of credit running from that time, and it will meet its bills as the customers meet theirs. The manufacturer may in turn sell his book accounts.

In dating ahead the buyer is not only entitled to the cash discount, but to interest for the unexpired time. For instance, a bill of goods is delivered on February 1. The dat-

ing is March 1, 2/10 net 30, and the bill becomes due March 31. If it is paid any time before March 10, the discount follows. But if paid, let us say, February 15, not only would the two per cent. be deducted, but interest at the legal rate for the unexpired time of the credit.

Department stores frequently agree to date bills ahead to attract trade and to avoid holiday rushes. Thus, purchases made in October may be dated as of December 1, bringing the maturity of the bill over into the new year.

The second form of mercantile credit is the promissory note, which needs no comment. It may be single-name or two-name, but it is a promissory note whatever the form. There is also the bill of exchange by which the seller draws on the buyer, as in grain and other basic products, raw material moving, as a rule, on draft with bill of lading. There will come to be shortly, as now obtains quite generally in Europe, the acceptance credit, whereby the buyer accepts the bill of exchange and thereby agrees to pay it at maturity, the instrument going into the money market as an "acceptance," and settling the book account as the promissory note now does in this country. Late reports of the Federal Reserve Bank show about thirty-six per cent. of their loans to be in the form of acceptances purchased.

THE MERCANTILE CREDIT FIELD

The mercantile credit man labors in a field widely different from that of the bank credit man. Many of the credits granted in the day's work in a business house are so small as to require but little investigation, other than looking up in the agency reports, and the loss would be trifling; while in banking, especially in large cities, the loans are of much larger average.

A business house has also the advantage of being able to adjust its prices to the risk, and may, in a measure, insure the credit by an advance in prices; but the bank man has but one price to all and this is fixed by law.

Moreover, the mercantile credit man deals largely with those in one line and can specialize, while the banker, unless he too specializes—and this he should not do—must know many.

The giving of statements in mercantile credit is not so

general as in banking credit, the information being obtained from other sources, although the statement is here becoming recognized as necessary also.

Not only is the character of the credit on a less secure foundation as it gets nearer the final consumer, but the property risk is less valuable as a backbone to the structure. For instance, the accounts receivable of a wholesale house are good collateral—they have been selected; they are good liquid assets; but the accounts on the books of the village grocer are uncertain of collection, slow and highly dangerous as credit risks. He has not selected his risks as carefully as has the man higher up. He did not know how, and could not be very strict if he did. And if he borrows he must do so from his local bank on his general reputation.

THE ENORMOUS COST OF RETAIL SELLING

All well-managed concerns analyze their business. Department stores do so for each department, carefully analyzing prices, mark-ups and mark-downs, sales, discounts and expenses. Conditions vary so greatly that one merchant cannot guide himself by the experiences of another. One may pay a rent of \$50,000 and the other but half that sum, and both sell to the same trade. Three stores are mentioned as selling approximately \$1,500,000 yearly, one paying \$65,000 rent in Indiana, one \$45,000 in New York, and one \$30,000 in Ohio. One pays ten times more for insurance than does the other. Obviously their selling prices for the same articles will vary.

One store will consider a gross profit of thirty-three per cent. ample; while others will be satisfied with less. The mark-ups range from twenty to fifty per cent., depending upon the department, but the average is from thirty to thirty-three per cent.

When you go into a department store and select a pair of gloves and leave your address, and expect to find them when you arrive home for dinner, you give little thought to the cost of placing those gloves in your possession. You have become so accustomed to service, quick, efficient and accurate, and to include the little things of life, that you take it as a matter of course.

Without much argument it must be apparent that to

conduct a large establishment, with thousands of clerks, expensive rent, quick and extensive deliveries, is costly. And every purchase must bear its proportion of that cost; and the consumer pays. The cost of the article is but a part of its selling price. The shopper comes into contact with a salesperson, and forgets the vast army of employees out of sight, but no less necessary to the smooth working of the machinery. There must be the buying force, the stock force, the selling force, the credit force, the accounting force, the delivery force, and the supervising and executive force. And your pair of gloves must pay something to each.

The cost of doing business has increased so fast of late years that it is officially stated that large concerns are satisfied to make as net profit their cash discounts.

In a pamphlet issued by Ernst and Ernst, certified public accountants, New York, the pair of gloves referred to are thus analyzed to show the distribution of cost of sale:⁹

COST OF THE SALE OF PAIR OF \$1.50 GLOVES.

.6667%	—Manufacturer's price	\$1.00
.0067%	—Freight, &c.	.01
.08%	—Salesperson	.12
.02%	—Rent	.03
.0067%	—Insurance and taxes	.01
.02%	—Advertising	.03
.0533%	—Office expense	.08
.0666%	—General store expense	.10
.04%	—Delivery expense	.06
		\$1.44
.04%	—Profit	.06
100.00%		\$1.50

FRAUDS IN MERCANTILE CREDIT

Great frauds are possible in mercantile credit because of the ease with which statements and accounts may be juggled and frauds covered. This is particularly true of merchandise, where a few figures, more or less, are easy to make and hard to discover. The picture was recently presented in court of a prominent merchant compelling his book-keeper to inflate the merchandise account in order to show a profit where a loss occurred. In a big concern, handling

⁹New York Times, April 6th, 1914.

LIABILITIES.									
Bills Payable for Merchandise.....									
Bills Payable negotiated to own Banks.....									
Bills Payable otherwise disposed of.....									
Due to Foreign Bankers on account of Credits.....									
Open Accounts, not due.....									
Open Accounts, past due.....									
Deposits of Money with us.....									
Liens on Merchandise or other Assets, ^{aside from R. E.} _{Mortgages.}									
Other Indebtedness, and of what composed.									
Total Liabilities.....									
Net Worth.....									
TOTAL.									
TOTAL QUICK ASSETS.....									
LIABILITIES.....									
EXCESS—QUICK.....									
SALES.....									

COMPARISON SHEET FOR CREDIT STATEMENTS

millions of dollars' worth of goods yearly, and whose stock runs into the six figures, to add a few ciphers here and there to the inventory is not difficult, and only a physical revaluation will disclose the exact state of affairs, although an expert accountant could verify an inventory to a fair degree of certainty without this lengthy process. The amount of goods on hand at the beginning of the term, plus the purchases, minus the sales, must equal the present inventory; but if accurate records are not kept, or other frauds indulged in, it is not easy to detect an irregularity, and only re-inventory will accurately determine conditions.

The banker must pin some faith in the statement of condition, and cannot always require an expensive and exhaustive audit for credit purposes, and the remedy would seem to be to severely penalize false statements. The advent of the Federal Reserve Banks and the credit operations outlined in their ruling of November 10, 1914, indicate a step in the right direction: for it is the obvious purpose to require statements of all firms whose paper is offered for rediscount, attested by oath, and it will doubtless follow that certified audits will presently be required. Clearing-houses have already taken such steps as a matter of good banking policy.

The uncertainty of mercantile credit and the frauds possible in such lines have resulted in credit bureaus, connected with all the leading industries that specialize in the credits of their own trade.

These credit bureaus have such complete reports of the men engaged in the particular line that a detailed history of the individual may be obtained upon request. They keep close watch upon the operations of the men in the trade, and follow up bankruptcies and assignments. For instance: the best hat manufacturers sell their product through about a dozen commission houses. These commission men work in harmony, employ an actuary to whom all orders and payments are reported. Having a record of past purchases and payments, the actuary is able to check the business operations of the trade. He will know if a merchant is buying beyond his means. Business is not spasmodic, but of slow growth, and a sudden, heavy order may be the forerunner of a failure. The actuary will detect the dishonest buyer, perhaps in time to report him as unde-

sirable. The way a man takes his discounts, cancels orders, returns goods, etc., may all be known because of the harmony in the central credit bureau.

These credit bureaus go into the moral side of a man closer than the large agencies are able to do, for they cover a special field, and can concentrate. They know the field, the various towns and cities, from their particular viewpoint. For instance, in a city like Schenectady, N. Y., employing large numbers of men, hats and men's wear in general would find a profitable field; but if a strike should occur in the General Electric works it would soon affect every line catering to men. Thus, the special credit bureau follows economic conditions, and advises its clients accordingly. Likewise a failure of crops in an agricultural section will have its effect upon certain lines.

Associations of credit men are operating local credit bureaus which check local credits, and interchange with other local credit bureaus, so that first-hand information may be had of any merchant in any town supporting a credit man's association.

In Philadelphia there are eighteen jobbing houses which handle a product of such bulk that the retailer, in order to make a profit, must purchase in his home market, as freight is practically prohibitive. These eighteen houses have an association which conducts a small mercantile agency containing the names of all purchasers in this particular line. Each member furnishes the agency at regular intervals with a statement of the retailer's standing with him, which is in turn transmitted to the other members. In this way it is possible to keep a complete check on all houses in this line and losses from bad debts can be practically eliminated unless the jobber goes against the unfavorable experience of his associates.

THE MERCANTILE STATEMENT

The property of a mercantile dealer can be correctly ascertained only from his statement, and this is coming to be the focal point of all credit operations. Not what the man says he is worth; not what he seems to be worth; not what his bank thinks he is worth; but what he is worth as tested by an audit made by an independent party who knows how, and does it with full knowledge of accounting principles.

No man can go into a store and look around, and say: "This man is good for a thousand dollars' credit." The goods may be on consignment, or mortgaged, the book accounts large, the bank account empty, the merchant's house mortgaged to the limit, his garage bill unpaid, his tailor's bill a year overdue; and unless the property is set forth in cold figures, no man living can judge the risk advisedly. Moreover, the merchant must be required to keep books. He must know what comes in; what goes out; if he gets his pay, and from whom; what his profits ought to be, and what they are; how much his sales are, and what the cost of selling.

The average merchant guesses at his selling price. The cost, plus the freight, plus what he thinks he ought to get, means his selling price, regardless of other conditions. Competition often sets the price, and the merchant paying high rent must compete with the one paying a low rent; likewise standardized goods must be sold at fixed prices irrespective of the cost of handling. A drug store on Sixth Avenue, New York, can afford to sell a proprietary article cheaper than one on Fifth Avenue. It may do more business at less expense and can afford to take close profits; while the other has high rent and other expenses in proportion.

The average merchant knows nothing about his turn of stock. He is satisfied to keep it up, make a living, pay his bills, but cares not for the process by which the results are achieved. Increased sales do not always mean increased profits unless the same volume can be handled at the same cost.

HOW TO FIGURE THE TURN-OVER

While the final net profit of retail dry goods stores is small, this is often offset by a large volume of sales as compared with the average amount of merchandise on hand throughout the year. This is what is known as the "turn-over," and the thing all merchants are striving to make as high as possible. A high turn-over indicates that the stock is moving well and that good judgment is being used in buying and selling, while a low turn-over shows the stock is not selling properly and that obsolete stock may be accumulating.

The amount of turn-over, of course, varies with different departments in the same store and with different stores, depending on their location with respect to the source of supply.

Merchandise subject to change in styles is turned over much more often than staples. For example, millinery and ladies' ready-to-wear clothing are usually turned from six to ten times per year, while carpets, linens, dress goods, etc., are commonly turned only two or three times.

The correct method of computing the turn-over is an important matter and is often improperly determined by many merchants. The proper way to do this is to divide the average monthly stock at retail into the sales at retail or, what is virtually the same thing, by dividing the average stock at cost into the sales at cost. Some merchants incorrectly divide the stock at retail as taken at inventory periods into sales at retail or, what is worse, divide the stock at cost at inventory periods into sales at retail. This latter method would give a turn-over at least fifty per cent. more than the real turn-over.¹⁰

The following on the subject of turn-over is well worth quoting:¹¹

"My judgment of the great importance of the turn of stock and the lack of appreciation by the merchant is such that I desire to make my point as impressive as possible and I will give you a few illustrations. Now, you who are not merchants would be surprised how few merchants realize the importance of this turn of stock and it is so simple that I know you will agree with me that it is really the A B C of business. Take an illustration which I have sometimes given to the college boys:

"A young man had \$5,000 and wanted to go into the men's furnishing business. He came to me for advice and I said: 'You take \$2,500 of that \$5,000 and bury it in the ground, then take \$2,500 and buy goods.' Now, it is very clear that the \$2,500 in the ground is inactive. In other words that \$2,500 invested in goods has got to be active for both. He is worth \$5,000, \$2,500 of which is dead, in-

¹⁰Ernst & Ernst, official auditors and systematizers, the National Retail Dry Goods Association, in the "New York Times."

¹¹E. M. Skinner of Wilson Bros., Chicago before Chicago Chapter, A. I. B.

active, does not move. The \$2,500 of active, new, salable goods is doing the work for the \$5,000.

"Take the United Cigar Stores. I have used this illustration a great many times and I have not as yet received any letters from the United Cigar Stores putting me on the payroll and I never talked with any of their officials to know if this is their system.

"I have been in the habit of going into the store near our establishment and buying a certain cigar. Well, just assume for the sake of argument that I buy twenty-five of this cigar once every two weeks. That would be twenty-six boxes of cigars I would buy of this store every year. Now, the clerk always brought down three boxes of cigars of this particular brand. I said to him one day: 'Is this your entire stock of this cigar?' He said: 'Yes, sir.' That is the best illustration I can give you. Here is one store that sells one customer twenty-six boxes a year. In other words, they turn the stock of that one cigar over eight times a year. Now, you know what that means. It means that on every dollar invested in that cigar they make eight profits, because they turn it eight times. As I say, I don't know, but I am positive this is their system. The sale of that box of cigars goes down on a sale-sheet and I will bet you that their sale-sheet of to-day is their order-sheet of to-morrow morning, and when that great truck comes around in the morning they bring in that box of cigars and it is put in there with the other two remaining."

GRANTING MERCANTILE CREDIT

In the granting of mercantile credit, all the elements that enter into personal credit are desirable and even necessary. First, we must have an honest man. He must have demonstrated this by his past conduct. Then we must have an able man, and this we can easily determine by his past and present performances. He must have demonstrated that he can run a business—for mercantile credit is granted to run business and not to furnish a home or keep an automobile. We can tell what sort of trader he is by his methods of advertising, credits and general aspect of his business. A store that is well located, well arranged and neat, stock fresh and well selected, employees loyal, well paid and fairly treated, is presumably prosperous. We can tell his credit methods

by his accounts receivable. This should be the focal point. It matters not how much goods he sells, if he doesn't get his pay, of what avail? Anyone can sell goods—only the good business man can get the money for them. Too liberal credit is conducive to large sales and slow pay. Does he pay his personal debts promptly? Does he live within his means and does he always take his discounts? Does he borrow at the bank, and if so, how much? Does he bear a good reputation in the trade? What is the worth of the concern? How much capital? Assets minus liabilities equal proprietorship, and unless the equation shows an overplus of assets, the business is insolvent, and unless there is sufficient capital success cannot follow. Business failures, in the main, are caused by lack of capital.

WHY MEN FAIL

The causes of business failures have been analyzed from time to time by the mercantile agencies, and the reasons are stated in percentages as follows:

	Per cent.
Lack of capital	29.7
Incompetence	30.2
Inexperience	4.6
Bad credits	2.
Competition	1.9
Fraud	10.3
Neglect	2.
Personal extravagance	.7
Speculation	.8
Other causes	17.8

A private investigation of the causes of 500 partial or total collection losses resulted in finding the causes of failure to be similar, as follows:

	Per cent.
Lack of capital	29.5
Incompetence	24.
Bad credits	4.4
Heavy expense	3.
Poor location	2.2
Expansion	2.
Fraud	4.
Neglect	4.
Extravagance	4.8
Speculation	2.1
Intemperance	2.
Other causes	11.60

THE DEVELOPMENT OF THE RETAIL STORE¹²

It is illuminating and instructive to look back for a moment and follow the development of the retail store in its relation to this most important matter of retail credit. In the early days of our retail business a store was started to supply the demand of the community for certain necessities of the people. If a town needed a store, a general store was started. It carried everything the community needed. Later if there became a demand for a more complete line of dry goods, or clothing, a separate store was started and so on along the line of specialization. If the community grew, more stores were started of the same kind, but only as the demand made them or seemed to make them necessary. These stores catered to the actual needs of the people.

As time went on and our present-day methods of intense living came into existence, no longer was it sufficient to simply fill the demand, but a demand was created, and then that great modern force known as advertising came into existence. It became the duty of advertising not so much to indicate why we should use this or that necessity, but to show us why this or that was a necessity, until to-day we are all, those of small means as well as those of large (and unfortunately those of us of small means are the more easily persuaded) just as sure we need a talking machine or an automobile as we are we should use Ivory Soap, Old Dutch Cleanser, or one of Heinz's 57 varieties, and so it goes along the line of merchandising, even as the advertising expert will tell you, first attention, then a desire for things is created.

Now, if this desire was created only among those who could afford the article, well and good, but like the rain, it falls upon the just and unjust, and those who cannot afford become even more intense in their desire than their more prosperous brothers. And so we have our present-day condition of the over-expansion of abuse of retail credit until it has in reality become a menace not only to the merchant and to the individual, both man and woman, but to the community itself. What would happen if all your merchants insisted upon all their accommodation credit accounts being paid promptly in thirty days?

¹²E. M. Skinner, of Wilson Bros., Chicago.

Another of our modern methods is the competition in credit as well as merchandise. In the strife for business it is not only the goods and the price but the willingness to trust. This is one of the great evils of present-day methods, an evil that like other evils is difficult at first, easier afterwards, until later on we become unconscious to the result of it. And it has seemed to me that with the man who wants to "feather our nest with no cash down," the piano dealer who will sell a \$150 piano for \$250 and take \$10 down and monthly payment leads. The legitimate retail dealer is somewhat to blame for permitting his charge accounts to grow until they consume one-half, two-thirds or perhaps all of his capital and at the same time educate the man, or more particularly the woman, to go in debt beyond his or her means or immediate ability to discharge. Unless your capital is sufficient you are losing your discounts, you are paying interest, you are slow in meeting your obligations, you are allowing your credit or at least, your methods to be questioned and you are building up an asset of so questionable a character that if you desired to sell your business the purchaser would not take it.

PROFITS

In a day of competition, business can no longer be done by hit or miss methods. The business man must know what his goods cost to manufacture; what to market. He must know details from a scientific standpoint. It no longer suffices to know what his rental charge is—he must know how much of that charge belongs in a certain article. The profits of to-day are made from the wastes of yesterday. And the wastes of to-day will be the profits of to-morrow. It is one thing to make profit from waste and another to waste profits.

A perfectly conducted business should make a legitimate profit on every dollar of merchandise sold; but as we are all human and must make mistakes, as the public is fickle and styles change all too quickly, there is reason for a sale at the end of a season of odds and ends of merchandise that the merchant has not been able to properly judge as to its salability; but for the loss of profit on sales before the end of the season, for the selling of a large proportion of the season's purchase in this manner is commercial suicide. The

merchant must have profit or he cannot succeed—he cannot charge an exorbitant profit on some goods to make up his loss of profit on others—he must find some way to sell the bulk of his goods profitably or he will surely drop by the wayside as one of the unfit. We cannot do business solely on “bargain sales.”

Speaking of the profits that attend merchandising, Messrs. Ernst and Ernst say:

“From a wide experience in many retail dry goods and department stores we have accumulated a large amount of data on expense of operation. It would not be satisfactory or fair to attempt to compare the results of various stores with respect to the individual items on account of the varying conditions.

“We have, therefore, picked twenty-five stores in different cities throughout the United States and find the average per cent. of gross profits (total net sales less cost of inventory value of goods sold), per cent. of net profit, and per cent. of overhead expenses to net sales are as follows:

	Gross Profit. P. C.	Overhead Expenses. P. C.	Net Profit. P. C.
Average 25 stores	30.42	23.84	6.58
Highest single store	35.10	28.00	10.66
Lowest single store	27.33	18.02	3.50

“From the above it will be seen that the average cost of the merchandise was 69.58 per cent. of the net sales, and that the cost of doing business was approximately one-third of the original cost of the merchandise. In other words, when a customer buys an article for one dollar, sixty-nine cents goes to pay for the cost of it and twenty-three cents pays for the expense of the merchant in supplying him with the article.

“The modern retail dry goods store of to-day, conducted along the right lines, has its business divided into many different departments, each being conducted independently, so to speak, from the others. The departments are little stores in themselves. This plan is followed so that the gross and net profit or loss can be ascertained as to each department. The merchandise, when purchased, is charged to the department to which it goes, the overhead expenses are pro rated over the various departments, and likewise the sales are kept

separate. This is the only method by which a merchant can tell whether a department is profitable or not. The percentages shown above, of course, refer to all departments taken as a whole.

"It must, of course, be understood that the gross profit finally realized is usually much less than the original gross profit at which the merchandise is marked up to sell. The losses on account of markdowns, special low-price sales, loss of merchandise, stolen goods, etc., are all absorbed in the final gross profit as determined for the year."¹³

LOSSES

The losses in retail credits as ascertained by an investigation of 1,000 stores covering various lines were as follows:

	Per Cent. of Net Sales
Furniture	1.94
Groceries	.47
Clothing	.34
Vehicles	.33
Hardware	.31
Jewelry	.23
Dry goods	.21
Department stores	.19
Drugs	.18
Shoes	.11
Variety goods	None

The secretary of the Retail Grocers Association of Kansas City figures that a loss of one per cent. of sales is normal for an \$18,000 a year grocery.

The most successful methods of reducing mercantile losses used by 286 merchants are: (1) A distinct understanding as to terms and limits of the credit; (2) individualizing customers—that is, knowing the man. One credit man states that he met one of his customers for the first time at a meeting of creditors; but if he had met him sooner there would have been no meeting of creditors; (3) coöperation with trade and trade bureaus; (4) monthly collections and good collection methods; (5) care in accepting new accounts.

BUSINESS RISKS

Business is divided into four main groups: Manufacturing, wholesaling, jobbing and retailing. The risk the man-

¹³New York Times, April 13th, 1914.

ufacturer runs is that he may not get back the cost of his material plus the cost of manufacturing, and, therefore, lose not only his profit, but the capital invested or borrowed. He must have a good cost system in order to know what it costs to produce his article. Then he must sell it. It may be he manufactures an article that is in steady and wide demand, and the profits, while they may be small, are steady and certain. But if he manufactures an article subject to changing fashions, the whims of the season--novelties—a change of public opinion may seriously affect his business. The manufacture of clothing, especially that for women, which is highly a matter of fashion, is precarious when the styles are radical and the changes come suddenly and without warning. The weather, the seasons, crops and so many factors enter into the consideration of a manufacturing credit risk that it is perhaps the most difficult class to judge. Labor strikes, the tariff, loose credit methods, depreciation of plant and machinery, and improper bookkeeping methods, are all factors to be considered in manufacturing credit risks.

Manufacturing may be divided into two general classes: The manufacture of goods for consumption and the manufacture of goods for production. The manufacture of consumptive goods divides itself into goods for necessities, goods for comfort and goods for luxuries. The first class would include such products as meat, cereals, canned goods, clothing, etc.—in fact anything to eat or wear that is not distinctly a luxury. Such articles as perfumes and toilet accessories are distinctly luxuries and could well be spared to a very large extent. As comforts may be included all those things useful but not necessary, which add to the conveniences of life.

It is obvious that an article such as meat will have a wide and constant demand, and a stock of such could be quickly turned into money. "Packing-house paper," as it is called—meaning the commercial paper issued by the great meat houses—is highly regarded everywhere. Likewise groceries of staple character which are, like meat, in constant and widespread demand. Such articles as canned goods and food products in general that will not spoil, coffee, rice, etc., are good security for loans from a realization standpoint: but perishable articles, such as butter and eggs, vegetables, while good as collateral for bill-of-lading loans,

are not of sufficient durability to make them good for a long-time loan. Wholesale hardware is a staple article, in constant demand, and not perishable, and, therefore, well regarded. Bankers favor print cloths, staple fabrics, woollens, white goods and staple lines of textiles. Anything that is a necessity of life is a good foundation for credit and any well-managed concern dealing in such generally a good risk.

Production goods are such articles as are necessary in the economic development. Such would be electrical goods, farm machinery, goods used in construction work, and those articles which are used to promote industry and efficiency. But business depressions affect all lines of activity, and even though the article be in the class of productive goods that have wide and steady consumption, depressions will naturally curtail production and competition will cut profits. Thus, a lull in building will have its effect upon electrical goods, elevators and other articles entering into construction work. Likewise furniture, while a necessity, will have its dull seasons when the economies of the people cut down expenditures to low ebb, for a large part of house-furnishing goods may well be classed as luxuries.

THE WHOLESALER AND THE RETAILER

The wholesaler is not burdened with a plant to maintain, machinery to wear out, a class of labor that is always crying for more wages, but he must have an expensive selling organization. The wholesaler can buy even seasonable and fashionable goods as wanted, and need not stock up heavily. The retailer is last in the list. More and more business is getting down to a cash basis, and with the extension of the department store idea, and the advantages of cash dealings growing in popular favor, the retailer as a credit risk is coming to be better understood. Moreover, his assets are largely quick assets—merchandise and accounts receivable.

In the chain of merchandising the greatest risk is taken by the manufacturer. Some credit men eliminate the manufacturer and loan to him, if at all, only when they have gone carefully into his affairs and become satisfied of his standing. One New York bank is said to have an officer who spends most of his time going around among manufacturers

and inspecting their plants. Photographs are taken and the affairs given most careful study.

STANDARDS

Banking credit standards are of the highest, and the test put by the banker is more severe than by the merchant. The latter wants trade; he does not want to lose a customer; his profits are larger than bank profits, and he can afford to assume risks; first, because it is his own money, and second, for the profit that eventually attends. Moreover, the merchant-creditor may extend the credit while the banker-creditor cannot.

When the book account is due it may be extended, or allowed to run until by the slow process of the law it is collected; but the bank cannot extend its debts. They are payable on demand, and it cannot settle one debt by incurring another as does the merchant, but it must pay or suspend. Under the Federal Reserve Act, banks will now be able to turn good mercantile credits into bank-note credits, and as long as they keep their paper in conformity with the rulings of the Federal Reserve Board, can depend upon being able to quickly turn good assets into circulating credits.

THE CREDIT DEPARTMENT

The division of credit which will particularly engage our attention, however, is that of bank credit. A bank has been likened to the human body, with the executive force as its head, the tellers its hands, the runners its legs, and further likenesses which imagination will readily supply. The life blood of this body is its loans and investments, and the credit department is analogous to the lungs and heart which keep the loans pure, liquid and circulating. To properly perform these functions, the credit department must be properly equipped and properly directed.

In the early days of American banking, loans were largely local. The cashier was chosen for his knowledge of local conditions. The bank made its loans with the expectation that they would run for a long time, and were often secured by real estate mortgages, and were in the nature of borrowed capital rather than working capital. The home

demand absorbed the loanable funds and a bank rarely thought of going outside its immediate field for investment. But with the development of the country and the concentration of wealth, and the growth of banking resources, wider fields had to be found both for the borrower and the lender, resulting in the credit department and the commercial paper broker—the one to buy and sell the paper and the other to pass upon its quality.

Twenty years ago, the credit department was unknown, but to-day it is part of the organization of every well-managed bank, with its officer in charge, files and elaborate information concerning not only its borrowers, but large concerns all over the country. The machinery of the credit department depends upon the size of the bank and the scope of its activities, the country bank needing less elaborate machinery than the city bank which furnishes information to its thousands of correspondents.

THE BANK AND ITS CORRESPONDENTS

Elsewhere it has been stated that the competition among the large banks for out-of-town accounts is keen. It is—extremely so. Most of the large banks have men who do nothing but follow up prospects and keep in touch with customers. If a new bank is proposed, as soon as the fact becomes known—and sometimes before it becomes public property—the machinery will begin to move to get that account.

The bank will have its representative busy himself immediately, and he will offer to see the bank through its organization period, help it select its books of accounts, attend to its affairs in Washington, if it be a national bank, get it a cashier, and altogether be a “big brother” to it until it can walk alone. And where banks are organized every day by men who have no banking knowledge it becomes needful that some guiding hand be at the helm to steer the new ship safely. Herein the big bank comes into its own. It knows just what to do to get the charter, to buy the bonds, lodge them for security, make the records, open the books, lay out the banking room, and in a thousand different little ways comes to the rescue of “the bank that would be.” It may be friendship that gets the account, but more often it is service. And

this service is real, helpful and to the point, at the time when it is most needed.

The city bank not only assists in the organization of the country bank, makes loans¹⁵ and keeps securities for it, but the principal service to its correspondents is the furnishing of credit information. It places its credit files at the command of its clients freely. It will recommend paper, buy it, and attend to its collection, all gratis, as part of the service rendered in return for the account. It, therefore, becomes necessary to have extensive credit facilities if it would give good service, and this it does.

CREDIT INFORMATION

The credit department is a bureau of information. It gathers information, classifies it and presents it when needed. It does not, as a department, as a rule, pass upon the loans, but furnishes the credit information that is essential to the granting of credit. The methods and the machinery may differ slightly in different banks, but the principles and the *modus operandi* are the same in substance. The information is generally kept in envelopes or folders, all data concerning one individual or corporation being filed together.

The information that finds lodgment in the credit department consists of: (a) The information furnished by the borrower, both direct and indirect: his statement of condition, preferably for a series of years, and other information concerning him that the credit department may obtain through conversations with him and reports concerning him.

(b) Information gained through the "trade," meaning the business concerns with which the party does business. This includes the promptness with which he meets his bills; whether he takes his discounts, and his general reputation as a credit risk, from a mercantile standpoint.

(c) Information gained from banks that have dealt with the concern, and especially in the line of loans and discounts, and as a depositor.

(d) Mercantile reports from the great reporting agencies, Dun and Bradstreet's.

(e) Miscellaneous information gleaned from various

¹⁵See "Loaning the Bank's Money," page 242.

sources, such as newspaper reports of judgments, assignments, bankruptcies and other published information that affects the credit standing of the party.

A record of the past performances of the borrower, his habits, his associations, his business record, is important; also a record of his average balances,¹⁶ his average borrowings; his promptness in paying; whether or not his paper has gone to protest; how much credit has been asked for and how much granted. If he issues paper on the market, this will be known, through whom, in what amounts, and how it is regarded in the banks handling it.

To get information as to his balances and borrowings on cards the method in use in some banks is to fix some date in the month when the work of the bookkeepers is liable to be the lightest, and have the credit department on this day send the cards to them. As soon as the information is filled in, the cards are returned to the credit department. In some of the large banks in New York where balance ledgers are kept, it is the custom for a man from the credit department each month to place the information on the cards, getting the average balances from the balance ledgers, the discounts from the discount department and the loans from the loan department. One card when completely filled will contain the monthly and yearly average balances for ten years on one side, and on the front the maximum and minimum loans and discounts and information for about ten years.

HOW CREDIT INFORMATION IS KEPT

Credit information is best kept in manilla folders such as used in filing letters, these being numbered, with the name on the outside. A digest of the statement is generally made on a form provided for that purpose, for the sake of uniformity and ready reference. This gives only the main facts in round figures. This appears first, the other information

¹⁶"Most modern banking institutions, especially in the well settled sections of the Atlantic seaboard, have adopted a ratio of balances to loans which they expect the borrower to maintain. It is ordinarily as one is to five. This proportion was fixed in the same manner as the 25 per cent. reserve which banks were expected to maintain. Both percentages are based on the experience of credit grantors which has proven that one dollar in cash will support a credit structure of from five to eight dollars. The maintenance of these balances is, in a measure, a check against over extension of credits, and provides a reserve against liability for the customer."

following in uniform order. The folders are indexed as to names in a separate drawer. But if the volume of credit names is not large the folders might be filed alphabetically. Inasmuch as credit information is cumulative, and becomes more complete and, therefore, the more valuable, it is needless to add that the information should be safe from fire. The credit files might be classified into "Own customers," "Paper offered in the market" (names being obtained as offerings come in), and "Others," such as prospects, large firms in the locality, etc. And if a bank discounts as a steady proposition for certain correspondents, it will have a file for such firms as it will accept for rediscount.

The Federal Reserve Bank proposes to have a central bureau of credit information, to assemble information concerning all large borrowers whose paper is offered for rediscount.

CLASSIFICATION OF RISKS

Credit department work bears endless classification and sub-classification, and extensive data can be obtained for the guidance of the officers, by classifying the paper held. The different lines of industry that are included in the bank's borrowings may be given a page or section in a loose leaf ledger, and the paper of the different firms coming under that classification listed as to amount bought, amount paid and balance for each month, the total being the amount outstanding against that particular line at any one time. A classification may also be made of paper held in various sections of the country so as to scatter the risks geographically.

It is also suggested that banks keep a record of the inquiries coming in as a guide for future information. For instance, a bank answers an inquiry along certain lines, and if this inquiry is listed on a card, it would be a clue for answering similar inquiries in the future.

Some banks run a statement tickler, to keep track of when statements are made by firms, or when audits are due, and thus keep their statements up to date; but the same purpose can be accomplished by running through the statements on file and bringing down to date any showing a year's age.

THE CREDIT MAN

The man who presides over this particular branch of the banking business must have many and varied qualifications. He must know men; he must know business. He must have a wide knowledge of how business is done, the terms of credit and the trade secrets. He should be analytic. He should understand accounting. He should know the law. He must be an observer, both of men and events. He must be systematic and conservative. He cannot afford to be reckless.

Probably the first essential is a healthy curiosity, which leads him to inquire into and ascertain the reason for conditions which only serve to excite the passing comment of the ordinary observer. To this must be added something of the traits of a Sherlock Holmes—well-trained observation, deductive skill and the ability to draw accurate conclusions. There is undoubtedly an intuition developed by the credit man which is sometimes called "credit sense." Some fortunate ones may be born with this invaluable aid, but it comes to the ordinary student only by the consideration of countless cases and by arriving at conclusions through painstaking analysis.

The credit officer is brought into direct contact with the executives; his work is under their eye and gains immediate recognition. He not only meets men, but learns business as a broad science, and in a few years has a large fund of valuable information. While his work may be pressing, it is varied, so that the grind that obtains in many departments of the bank's work is not manifest here.

On one of the clay tablets of the Babylonian period, recording the business transactions of the time, there is an inscription to the effect that "In the month of Ab of the first year of Neriglissar, King of Babylon, I (Belilit) sold Bazuzu, my slave, for half a mana, five shekels of money, to Nabu-akhi-iddin, son of Shula, son of Egibi. I took his note, but he has not paid the money," showing that even in those days bad credit risks were in existence and good credit men necessary.

LOSSES EXPECTED

In mercantile transactions each sale carries a profit, and if the losses are kept within bounds (one-quarter to one-third of one per cent. of the sales) the merchant is satisfied. He must take risks in order to make profits; and if he accepts only those orders which will surely be paid promptly and without effort, he will lose much valuable trade. He expects losses, provides for them and accepts them as incidental to the business. The banker does not expect losses; he does not arrange his prices with losses in view, and endeavors to avoid them entirely. Moreover, the merchant is dealing in goods to which he has title and the losses are largely his own losses; whereas the banker is lending money which belongs to other people, and which he has obligated himself to pay on demand.

THE ESSENTIALS OF A GOOD LOAN

Good credit is the bedrock of business success; poor credit is the quicksand of disaster. As a general statement, that credit is good which is based upon an exchange of commodities. The only exceptions are those loans which are in the nature of an accommodation, and yet have behind them the strength and financial soundness of one whose name and credit standing are sufficient to offset the lack of an exchange in values.

It is no function of a bank to furnish its patrons with permanent working capital, and good banking credit is based upon loans made after due consideration of the borrower and his standing, and supported by collateral, whether pledged or not, that is subject to prompt and full liquidation. An authority on banking states that a well-managed bank should have twenty per cent. of its investments in high-grade securities; twenty per cent. in commercial paper which it is under no obligation to renew, and purchased in the open market; and sixty per cent. in loans to its customers.

The bank must meet its obligations as the merchant meets his—by the maturity of its credits; and the credit that does not promptly redeem itself is unsound. The greatest measure of safety in the credit system lies in the fact that no great part of the outstanding obligations will have to be

met at any one time. Experience has proven this beyond peradventure, and when a quick demand for unusual redemption occurs, panic results and the credit system collapses. It is needless to add that good credit does not consist in the banker lending to himself. He cannot be a judge of his own affairs. The Comptroller of the Currency has digested the causes of failure of 418 banks, and finds that 214 were caused by excessive loans to officers and directors, fraudulent management and embezzlement.

ELEMENTS OF SOUND CREDIT

By weight of authority, it is conceded that in granting credit three elements must be considered, namely:

- | | | |
|--------------------|-----------------------|-----------------------|
| (a) Character | (b) Capacity | (c) Capital |
| (a) Reliability | (b) Capability | (c) Resources |
| (a) The man | (b) The methods | (c) The means |
| (a) The moral risk | (b) The business risk | (c) The property risk |

Every application for credit does not possess all three, nor does it need to. But good credit, however, depends upon the degree in which these elements enter into the risk. The man with character, but no ability or capital, is doomed to failure. He has neither funds of his own nor the ability to safely use the funds of others. Good intentions never pay bills. He who has ability but no character is a bad risk—he may use his ability to defraud. Lack of ability and capital accounts for three-fifths of the business failures. The business that “turns over” frequently can run with less capital than that which must be done on long credit. But even though his capital be small, the man with character and ability will be a safe risk. The ideal risk, however, is adequate capital, unimpeachable character and sound business methods.

THE MAN—THE MORAL RISK

Character means more than mere honesty. It means habits, companionships, past record, antecedents. Business character is business reputation, built up by long years of fair dealing. The man who claims to be honest must prove his claim by squaring himself with the world and keeping himself so. In the coöperative credit banks of Europe,

which have been eminently successful in the granting of credit, character is made the basis of all loans, and the losses have been remarkably few. While credit deals less with men than with things, the man must be analyzed as well as his possessions, for the statement, being a matter of honor (unless made by an independent audit) must be characterized by good faith or it is worthless.

HIS METHODS—THE BUSINESS RISK

It is not enough that a man be good—he must be good for something. We test his ability by the manner in which he conducts his business, and by the character of that business. Is it, first of all, a legitimate business and sound; or illegitimate and full of risk? Is it stable, or subject to sudden fluctuations—one that the whims of fashion may jeopardize overnight? Has the owner demonstrated his ability to manage a business; does he manage this one well? Has he built it up himself, or did he inherit it? Is he experienced or is he a novice? (Experience must precede the employment of capital, else the latter may be lost while the former is being acquired.) Is it well stocked and well located? Are the profits ample, and are the expenses reasonable? Does he grant credit with care, or indiscriminately? Does he over-buy, over-trade, over-trust? Is he prompt in his collections and prompt in his payments?

HIS RESOURCES—THE PROPERTY RISK

Behind every good loan there must ultimately be property, tangible and convertible into money without great cost and undue delay. It is not enough that there be stock—it must be salable and seasonable, and of such nature as to help, not hinder, the business. The kind is as essential as the degree. It is not enough that there be book accounts—they must be collectible. Many a man has failed with a fortune on his books. A large business does not necessarily mean a safe business—its very largeness may carry it to destruction. Is the capital borrowed or inherited, and if so are there any “strings” to it? Is the capital ample? Will the lack of money make over-borrowing necessary, and burden the business with too heavy interest charges? It takes

money to do business, and while a large amount of ready cash need not, and should not, be idle in the bank, it should be quickly available by the maturity of obligations to meet current demands.

THE STATEMENT—THE BORROWER'S ESTIMATE OF HIMSELF

Modern credit is based upon statements prepared with the end in view of showing the true condition of the business at a stated time. Unless made by an independent auditor who has no interest, aside from accuracy, it resolves itself into a man's estimate of himself. Its purpose is: To reduce losses; to minimize risks; to assist the worthy; to eliminate the unworthy.

The statement consists of two parts: (a) Assets (from the French "*Assez*" meaning "enough"), and (b), the Liabilities. After making due allowance for the shrinkage inevitable in all business, the assets must equal or exceed the liabilities or a state of insolvency exists.

The assets readily divide themselves into (1) Liquid or quick assets, such as cash on hand and in bank, securities, collectible book accounts, bills receivable, marketable merchandise, and any other resources that may be turned into money or used as security. (2) Fixed, or non-liquid assets, such as real estate, furniture and fixtures, machinery, horses and trucks, etc.

The question, therefore, to be decided in analyzing every statement is this: Is there enough? Not, will this man pay his obligations; but can he meet them as they fall due? Not, has he made money in the past; but will he continue to make money in the future? Is this a "going" concern and likely to continue so?

No two statements are alike and no general rule will apply to all; each application must be judged by itself. It is needless to say, however, that in granting credit, neither friendship, religion, politics, social or family ties, or sentiment, should play any part—simply the cold, critical, analytical judgment that comes from experience, observation and study.

The weakness of the statement lies in the fact that the borrower is tempted to unduly appreciate his assets and depreciate his liabilities. And it is the credit man's particular

business to see that the assets are not unduly magnified. Current liabilities cannot be met from fixed investments such as real estate and machinery, and the burden of carrying the business falls upon the liquid assets, leaving it to the fixed assets to add strength and stability to the structure—backbone, as it were. Some credit men are of the opinion that the fixed assets should be eliminated from consideration entirely, while others hold that they should be scaled at least fifty per cent. from the borrower's figures, and then regarded as security only. But however this may be, if the fixed assets bear a large proportion to the liquid, they are an element of danger and tend to weakness; if small, they tend to strength.

Just the proper proportion of capital to volume of business; whether or not the business "turns over" promptly and profitably; whether accounts receivable are too large or too slow in maturing, can only be learned by experience. To correctly judge these elements in the granting of credit is to be a good credit man. And in passing upon credits, it must be realized that it is the business of the bank to loan money, and the credit that is refused because the application has been incorrectly analyzed has worked an injustice to the bank and perhaps an injury to the borrower. Profits arise solely from sound credits; losses from the unsound. The credit man must, therefore, play a double rôle: for the sake of his bank, and for the sake of the borrower, he must accept the good; and for the sake of his bank, irrespective of the borrower, he must reject the bad, and only training and experience can teach him to distinguish the one from the other.¹⁷

STANDARDIZED FORMS OF CREDIT STATEMENT

Credit was formerly based upon the knowledge possessed by the bank, either through its cashier, its loan committee or directors, of the borrower's affairs. His balance at the bank was known only in a general way and his trade connections and standing only by whether or not he had drafts made upon him by his creditors.

Statements of condition are a development of the past

¹⁷"Essentials in Granting Credit," ante p. 372.

fifteen or twenty years and banks have learned that they are a necessary part of credit operations, and the firm that will not make them is not entitled to credit. Country banks even yet operate under the old rule, but the banks in all the larger places are now coming to see the importance of accurate and up-to-date credit information.

The statement is the basis for all the other information, since it contains the basic element of property worth. The form of the statement in vogue to-day is an evolution that has come through the experiences of banks and credit organizations working together to devise a form complete and yet simple. Most, if not all, banks now have forms of their own, these being more or less standardized, so that uniform statements are now quite common. These statements are made or should be made at least yearly and a comparative statement form used, where the various items from year to year may be set opposite one another for comparison purposes.

THE STATEMENT MUST BE RECENT

The statement is a digest of the firm's books and is intended to show the true condition of the business at the time of the audit, which should be by an independent party whose sole object is to present a true statement, conservative and safe, as a basis of borrowing.

It must be recent, not over a year old, preferably within six months. Banks now have standard forms for this purpose, so that the information desired will be given by all borrowers alike and not only includes the balance sheet, but the statement of profit and loss account.

It is more important that the bank shall know that the firm has made and is making money, than it is to ascertain that it has certain property and property rights. Its profits pay the proprietors for conducting the concern; out of the process of making the profits the concern must pay its loans, and out of the property the loans must be paid if the business as a going concern fails to show a profit. The banker who loans without a statement loans in the dark. The statement is the lighthouse guiding him which way to steer.

FALSE STATEMENTS

There is always the danger that the statement may be false, and, therefore, of little use as a basis of credit. It may be wilfully false or unconsciously false. It depends largely upon the moral status of the borrower. In many cases it is the result of poor bookkeeping methods, the borrower being himself deceived. It has been said that it is not the customer with intent to deceive who brings the losses, but the customer who is himself deceived. He overestimates himself, is overconfident of success; overreaches himself, and jeopardizes his own and the bank's funds. And here the value of an independent audit is coming to be recognized. Clearing-houses are taking the matter up, and lending weight to the movement to make independent audits compulsory as a prerequisite to loans. And if this audit is made by a recognized firm of standing, whose work is well known for its quality, there is no risk in the statement being false.

Some firms have been sending in statements signed by clerks, bookkeepers and other irresponsible employees, and this should not be countenanced. The Federal Reserve Board will require sworn statements of condition. The obtaining of goods under false pretences has always been a crime, and to obtain credit should all the more be so. Under the coaching of credit men and banking organizations several States have enacted stringent laws making the giving of a statement which is false for the purpose of obtaining credit a penal offense, as it should be.

STATEMENT RECIPROCAL IN VALUE

The National Association of Credit Men has realized the reciprocal value of the signed statement and steadily advocated its use as a benefit to both borrower and lender. In a treatise on the subject the association says:

"Good credit in the markets of the world enables every merchant to add to his ability to do business. It gives him the use of enlarged capital, thus enabling him to carry a more complete stock, increase his sales, and magnify his profits.

"Large assets are not always necessary to the creation

of credit; what is most desirable is that credit be in relative proportion to the actual assets, and in harmony with conditions which create and maintain it. A merchant's capital is the sum of his net available resources, plus his credit. The giver of credit is a contributor of capital, and becomes, in a certain sense, a partner of the debtor, and, as such, has a perfect right to complete information of the debtor's condition at all times.

"Credit is given a merchant because of the confidence reposed in him. Requesting a statement when credit is asked is not a reflection on one's character, honesty, or business ability, but is done to secure information to enable business to be conducted intelligently.

"When a statement is made it should be absolutely correct. To make it so necessitates the taking of at least an annual inventory and the keeping of an accurate set of books. Statement giving, therefore, will tend to make a debtor a better buyer, because more familiar with his stock, more careful in giving credit, more conservative in incurring debt, and will result in a better knowledge of his business generally.

"A merchant who desires to serve his own best interests should recognize that his most valuable possession, apart from his actual assets, is a sound, substantial and unquestioned reputation as a credit risk, and that, under the prevailing conditions and demands of business, the most effective, and eminently the best way to prove his basis for credit, is to be willing to submit a statement of his financial condition."

ANALYZING A STATEMENT OF CONDITION

The statement should show the assets and liabilities in the following order:

Quick Assets—Cash on hand and in bank, bills receivable, accounts receivable, merchandise.

Quick Liabilities—Notes payable, accounts payable, other quick liabilities.

We then have the *Fixed Assets*—Land, buildings, machinery and fixtures, good will, other investments.

The *Fixed Liabilities*—Mortgages, bonds and other fixed liabilities.

The intent of this classification is to permit the ratio of quick assets to quick liabilities to be quickly determined. The proportion that quick assets should bear to quick liabilities is a matter of opinion. It depends upon the trade. Some credit men make it a rule to have at least two to one—two and a half to one if possible. But in such lines as meats, one and a half to one would be considered ample; while in wholesale hardware, groceries and dry goods one and three-quarters to one is considered ample, or at least enough, by the rules already stated.

TWO TO ONE

Quick assets are bound to shrink during the process of collection, accounts receivable particularly, and there must be a margin of safety, and this margin depends upon the business and the methods of the men in charge and general conditions; but the ratio of two to one is considered sufficient under ordinary conditions; for if this be not enough things are in a bad way.

While the ratio of safety naturally varies with different lines of business and each case must be considered on its merits, a careful banker will be inclined to avoid buying commercial paper of concerns whose statement does not show a ratio of quick assets to current liabilities of at least two to one. On this basis, any shrinkage of the working assets in liquidation less than fifty per cent. will still leave a margin over the debts. But in the case of a concern whose ratio of quick assets to liabilities is only 1.50 to 1.00, it is evident that any shrinkage of one-third in the quick assets will endanger the prompt payment of the creditors' claims.

While fifty per cent. is a liberal margin of safety, it must be remembered that a statement is usually made when the liabilities are smallest, and if a concern cannot show quick assets of twice the current debts at that time, there will probably in the height of its season be only a very small margin of quick assets above the debts, so that a shrinkage amounting to only a small percentage of the assets will wipe out the excess of quick assets over the current liabilities, and will thus endanger the prompt payment of the maker's note.

In this analysis both the slow assets, such as real estate, fixtures, obscure investments, etc., and the slow liabilities, such as mortgages, bonds, special capital, etc., may be ig-

nored; because it may be safely assumed that in the brief period that commercial paper has to run there will be no material change in such fixed assets or slow liabilities.

The banker is not confined to deductions from the borrower's figures in determining the degree of convertibility of the latter's assets. An actual and consistent test of convertibility is furnished him in the manner in which the concern meets its current trade bills. The assets of a merchant who is able to discount all of his accounts payable are evidently more liquid than those of a merchant who requires the full terms, in spite of an attractive discount offered for earlier payment. And if a merchant, in addition to the regular terms of purchase, is tardy in meeting his merchandise debts, it is evident that his assets are not turned into cash as readily as they should be, either because the merchant is not moving his goods, because he is selling to a poor class of trade and his collections are slow, because he is carrying too large a stock of merchandise, or because he is trying to do too large a business for his capital.

Whatever the reason, when a banker learns that a borrower is slow-paying, it behooves him to use great caution in loaning; and if the condition is chronic, the risk outweighs the profit on the transaction, and the credit should be discontinued. Tardy payments are not only a sure sign of immobility in the assets, but they place the merchant at the mercy of his creditors, who may at any time petition him into bankruptcy, and the percentage of the shrinkage of assets in the hands of receivers is too well known for comment.

In analyzing the figures, it is very important to note the ratio of liabilities to capital; the heavier the debts (other things being equal), the greater the risk, because a less shrinkage or loss of assets is necessary to make them inadequate to liquidate the debts. For instance, if the liabilities are half the assets, a shrinkage of fifty per cent. would be required to cause a loss to the creditors; but if the debts are two-thirds of the assets, a shrinkage of only thirty-three per cent. would be required.¹⁹

CASH

While a large amount of cash is not desirable, or in some cases necessary, there should be a fair bank balance as a mat-

¹⁹Oscar Newfang in *The Bankers Magazine*.

ter of courtesy to the bank, as well as a quick source of funds for the daily need of the business. A proper working balance is always desirable. In the panic of 1907 some firms did not have two weeks' payroll on hand and were hard put for ready money. Various concerns look at this proposition differently. For a concern that is borrowing from one bank only, it is perhaps not so important that they carry large cash balances, provided the bank does not insist upon it. If, however, they are seeking credit from banks all over the country by placing their paper through brokers, they should be able to show that they will be able to take up part of their obligations if presented, without great difficulty. This means that they ought to have an ample cash balance.

The cash should not be too large, for it represents idle money; neither should it be too small, for it may inconvenience the firm. Just the proper proportion depends upon the nature of the business.

Cash on hand and in banks is usually worth its listed amount. If any "I. O. U.'s" are in the cash, of course, they should be eliminated, as well as all cash items that are not cash or equivalent to cash. Because cash has been paid for a piece of paper it does not follow that cash will be received for it.

BILLS RECEIVABLE.

Many progressive concerns prefer to carry open accounts rather than have on hand their customers' notes. As a consequence this item has more or less given way to accounts receivable. Where such bills receivable do figure prominently we must be careful to learn their exact nature. They may be clean merchandise notes, easily collected, or they may be old notes which have been renewed time and again, and enlarged by added interest. In but few lines are notes now given, and they do not, as a rule, appear in large volume in the average statement.

Do these include any notes of the firm, officers, employees, or others interested, whose collection would be unpleasant, if not impossible? Do they represent money loaned? They should be for goods sold and delivered, or for open accounts settled by note, and if for the latter purpose, the account should not be of long standing. An overdue account settled by a note is not a healthy asset.

Are any of these notes pledged, or rediscounted and included in bills receivable? Are any past due? Have any been renewed or extended? How much of this item represents amounts due from branch houses, affiliated concerns, etc., "a wheel within a wheel"?

It is a difficult yet an important part of the statement analysis to determine if the ratio between the various assets is normal for the business. To do this accurately requires a general knowledge of the terms and customs of the business. For instance, in raw silk the terms are six months' note, and we would expect a high ratio of bills receivable, and a small accounts receivable. In sugar refining the terms are seven days net, and a similar ratio would indicate that something was wrong. There should be few, if any, receivables in sugar.

Lumber, raw fur and other concerns sell on notes, and we may expect to find these in considerable quantity in their statements. Agricultural implements are also sold on notes, running over a series of months, and these we would expect to find in large volume in such a concern. Automobiles, scales, cash registers, etc., are likewise sold on notes, due serially, and while these are in the main good, they mature slowly; and in case of failure of the concern would be slow in collection; for as soon as a house fails it becomes difficult to collect outstanding accounts. In a recent reorganization of a large department store in New York, it was found that the regular customers would pay their bills contracted after the store reopened in preference to making payment of the old balances.

The firm that sells on note should not have a high proportion of accounts receivable, and a business where the credit is on book account should not have many notes in its assets. The two forms of credit should not appear together. Notes are often taken to settle overdue accounts, and indicate that the maker is not in funds. If he cannot take his discounts and meet the terms of the sale, he is a doubtful risk, although not necessarily a bad one.

ACCOUNTS RECEIVABLE

Accounts receivable should be the undisputed obligations of customers of the concern. They should stand in the place

of merchandise sales, which they truly represent, and should be absolutely free from pledge. They are the best quick asset, next to cash and bills receivable, and should be of recent date, properly scaled.

Accounts receivable are the measure of the merchant's ability to sell as applied to merchandise. Merchandise by itself is an asset without life. It does not sell itself. But book accounts, well selected, will automatically turn into money by the process of time, and at little expense. Even the death of the proprietor will not affect this process. The debt must be paid.

Are all such accounts due from customers? Are any fictitious? Have the doubtful accounts been eliminated? How much has been allowed for depreciation in the collection of these? Are any of these pledged to factors or commercial bankers or banks.

How much of this amount is due from branches and affiliated concerns? What are the terms of sale? Is there a good collection department? What proportion of bad debts is charged off yearly?

Are the accounts and bills receivable for a short time and being constantly turned over? When a corporation's note, usually at four or six months' maturity, is bought, you ought to know that the corporation is likely to receive returns from sales of their merchandise in an equally short time, so that they are not depending on re-borrowing to pay off maturing obligations.

Another important factor is the relation of the accounts receivable to the merchandise. Conservative credit men are expressing a preference in the ordinary wholesale and jobbing lines for a long line of receivables rather than a large stock of merchandise. An eminent New York credit man once said that if you have any suspicions regarding a statement, ask the maker to submit a detailed list of his accounts receivable with the dates of the invoices. If he is attempting to deceive, such a request will invariably bring him into the open.

The yearly sales are also valuable as a guide to the condition of the accounts receivable. Having the total yearly sales, they may be divided into monthly averages, and the average sales determined. If the terms of sale are thirty days, the firm should not have over forty-five days' sales on

its books, and if so, it shows that credit is too loosely extended and collections too slow. It might, of course, be due to heavy sales just preceding the time of statement, or a prevailing depression making collections slow, but the reason should be ascertained. Every overdue account represents idle capital of the firm which is doing nothing. The borrower might be asked to classify his accounts into thirty and sixty-day and overdue accounts, to show the condition of his collections.

When the amount of the annual sales is not obtainable, a fairly accurate idea of the activity of the business may be obtained by noting the amount of the accounts and bills receivable, and considering this in conjunction with the customary terms of the business. For instance, in a line extending terms of two per cent., ten days, sixty days net, good customers' receivables of \$200,000 would be a reasonable assurance that the annual sales were well over \$1,000,000. This applies only to lines in which business is done upon credit; a retail cash business could not be judged in the same way.

MERCHANDISE

Merchandise is the most difficult of all the assets to correctly analyze or appraise. In this item there may be gross overstatements and gross frauds. Goods are worth, not their cost, but what they will bring. But to appraise merchandise at its selling price is to gamble on the sale, and anticipate profits. No accountant will accept inventory at selling prices. Cost is the nearest correct basis, inasmuch as cost at least must be realized or bankruptcy must quickly follow.

If the merchandise is seasonable and salable, the credit man could tell, by knowing the turn-over for the year, about how long it would take to turn it into money. In a stock of meats, a few weeks would turn the stock into cash. Groceries a little longer; dry goods a little longer; furniture a little longer; drugs a little longer, and so on as the goods become less and less of the necessity class and get into the luxury class. Some old stocks could hardly be given away.

It is said that a well-managed department store will not order a large number of a new book; but if it anticipates the sale of a hundred copies, it buys ten; orders ten more when

eight are sold, and so on until the demand slackens, and thus it finds no dead stock on its shelves.

Where the merchandise is both finished and unfinished, it frequently happens that either or both are quickly salable, and, therefore, quick as an asset; while in the manufacture of heavy articles such as machinery, the raw material is merely iron and steel, while the manufactured article may be a printing press.

Too many of the old-time merchants, and some of the least experienced of the modern school, are inclined to value merchandise in their financial statement at cost, and as a result they go on year after year deceiving themselves as to their real financial standing. The value of merchandise to the merchant for the balance sheet, or other purposes, is determined by reducing the real selling value by a percentage that will cover expenses and show a profit when it is sold.

INVENTORY

Messrs. Ernst and Ernst, official auditors and systematizers for the National Retail Dry Goods Association, give this as the rule for inventory: "The real value of any stock of goods should be based upon selling price less original per cent. of mark up, representing the profit. From our wide experience in dry goods and department stores throughout the country, we have found that each store has a uniform percentage of profit which it aims to obtain in selling goods, and when the selling price is reduced we believe the inventory valuation should be correspondingly reduced. As an example: When an article costs \$1.00 and is sold for \$1.50, the percentage of mark-up is thirty-three and one-third per cent. If this article is reduced to sell for \$1.00, we believe the inventory value should be reduced one-third, or to sixty-six and two-thirds cents, leaving a mark-up of thirty-three and one third per cent. on the selling price."²²

Pertinent questions in regard to merchandise are: Is it finished or unfinished? How and by whom and when was it valued? Is any merchandise hypothecated, or under trust receipt? Is the stock fresh and seasonable? How much is held under consignment?

²²New York Times, April 6, 1914.

A careful credit man would not make large advances to a merchant whose assets consisted mainly of merchandise on hand. It must not be on his shelves, but on his books in part, at least, and turning over frequently.

The liquidity of a stock of goods may be seen by a simple example of a small country grocery, which has a stock of not over \$500 and yet its total sales are over \$10,000 a year, indicating that the stock comes in and goes out twice each month. This, of course, is unusual; but all business should turn over periodically, so that dead stock does not accumulate.

Many bankers seem to place greater stress upon an outside audit of the borrower's books than upon his moral character, in estimating the reliance to be placed upon his figures. While an audit is certainly of some advantage, it must be remembered that the auditor's limited time never permits him to verify inventories by actual count, nor does he usually verify the accounts and bills receivable by actual correspondence with the debtors. That there is no other indebtedness than the amount shown by the books, he has, of course, no means of knowing.²⁰

Do the accounts receivable bear the proper ratio to the merchandise on hand? In other words, are they converting their merchandise into accounts receivable and not allowing it to accumulate on their floors? We can determine about this if we know their total volume of sales and terms of their sales. For instance, if they sell on ninety-day terms and get their money on an average of four months, and the total sales are \$900,000, we would conclude that their amount of merchandise at any one time should be about \$300,000, or one-third of their total sales. In this case we assume they turn over their money three times a year.

TRUST RECEIPTS

Many kinds of merchandise are assets which can be pledged with warehouses against advances. This furnishes another example of the care that must be exercised by a banker who makes loans on the security of the general assets

²⁰Mr. Newfang ante p. 445.

of a business to prevent a preference in favor of other creditors. The value of the merchandise stock will depend largely upon whether the goods are durable or perishable, staples or specialties, luxuries or necessities. If they have been imported under a commercial letter of credit and the foreign exchange dealer has not been paid, under the form of trust receipt commonly used, he has a claim against the merchandise in any form into which it has been converted, provided it can be traced—that is, he can seize the goods, he can seize the accounts arising from their sale, or attach the money representing the proceeds of collections if it is earmarked in any way to permit identification.²¹

CAPITAL ASSETS

The opinion as to the value of capital assets is wide. Whether land, buildings and machinery add worth to the concern is open to discussion, and there is a difference of opinion among credit men. If the fixed assets were to be turned into money it would stop the whole business to realize upon them, so that selling the fixed assets is out of the question; while in the case of liquid assets, it is presumed that they will automatically turn into money, and keep the business going.

The banker likes liquidity of assets. He cannot collect a loan out of brick and mortar half so quickly as out of a stock of goods. And land and buildings never can be sold as quickly as merchandise.

A firm in Brooklyn at one time based its worth mainly upon a large tract of well located dock property. It was its principal asset. For seven years it has been trying to sell that property and it remains to-day on the market as unsalable. It carried the firm down. If the property is mortgaged, of course only the equity can be considered, and so many properties have a limited utility that this must be considered even in allowing for the equity. A specially erected building may have value to the concern for whom it was erected, and yet to any other would lose much of its value. If a concern has its capital too largely in fixed assets, land, buildings and machinery its bankers must carry

²¹Mr. Snyder ante.

its liquid affairs. Working capital must come from somewhere and it devolves upon the banks to furnish it.

Current liabilities should not be incurred for fixed purposes. A building should be erected from the mortgage loan at the savings bank and not from commercial paper sold in the market; and the mortgage loan should not carry merchandise from the manufacturer to the consumer. Liquid loans for liquid purposes, and fixed loans for fixed purposes should be the rule.

Pertinent questions relative to the real estate are: Land—what is its value? Buildings—how old? What rental do you pay? What is the fair market value? By whom was this value placed, and when? What provision is made for depreciation of the buildings, the plant and machinery? What insurance is carried? What is the assessment? Are the taxes and assessments paid?

MACHINERY AND FIXTURES

Machinery and fixtures are so very uncertain as an asset that they can hardly be considered an asset at all. Machinery wears out, becomes obsolete, and is soon scrapped by time and advancing improvements, if not by the owner. It is a slow if not a doubtful asset wherever it appears.

Is the physical property in good shape? While a banker does not look at the items of plant and machinery as closely as those in the quick asset column, yet it is very important to know that the manufacturer, for instance, has a good plant, well adapted to his uses, well protected from fire loss and conveniently situated to transportation. This naturally brings up the next question.

Is depreciation on the permanent investment taken care of? The banker should insist that the borrower depreciate the book value of his plant and equipment each year corresponding to their actual loss in value through use. The conservative manufacturer will always do this as he does not want to deceive himself, let alone his creditors.

“Other investments” will include stocks and bonds of other corporations, stocks held in affiliated concerns, and other investments which must be investigated to know their marketable value before they may be allowed in the state-

ment at all. Some such holdings would be prime security and prime assets; others would be of no value at all.

LIABILITIES

The principal quick liabilities are notes payable and accounts payable. Notes payable are of four classes: Notes given for merchandise, and not settled by book account; notes payable to the dealer's bank; notes payable through brokers, and notes given for other things, such as fixtures, machinery, etc., not classified as merchandise, together with notes given for advances of funds for capital purposes.

The merchant should not issue notes for merchandise and borrow in the open market at the same time; his open market borrowing is for the purpose of taking his discounts and he ought not to pay by note. If the custom of the trade is to settle by note, as in lumber, payables are legitimate, but not otherwise.

Bills payable should be either for merchandise or for money borrowed. If for the latter they would usually be payable to banks or note brokers. Many houses are judged by the brokers offering their paper on the market. A reliable house can ill afford other than a first-class broker to perform this very important task. Here we have an insight into a concern's ability to finance. If they are putting much paper on the market they should be reserving their credit at the bank, and vice versa. If we find, however, that in proportion to their business they are utilizing both means to their limit and also giving notes for merchandise, we may judge that they are "sailing close to the wind," a signal for us to reef the sails of our credit line.

Unless it is a custom of the trade to settle bills in this way, it indicates overtrading and undercapitalization, both conditions which must be promptly reckoned with if a crash is to be averted. In some statements the "bills payable" are not separated, but the presence of odd cents is sufficient to put one on inquiry, unless, under the concern's bookkeeping system, unearned interest is deducted from the gross "notes payable" and only the net recorded. If the concern is selling its paper in the open market, the notes payable to banks should be comparatively small, as the conservative borrower keeps his bank lines open when his paper is on the street.

Probably no other item in the depositor's statement can be more readily checked than this one and no other is more important. A recent case is recalled where an investigation which consumed half an hour and the writing of one letter, revealed a discrepancy of nearly \$20,000 and finally resulted in a receivership and reorganization.²³

Queries regarding notes payable: How much is carried with your own bank? How much on the market? What banks do you deal with? When do you borrow at home? When in the market? How much through each? Do you borrow continuously in the market? Do you discount all bills?

ACCOUNTS PAYABLE

If we find that bills payable is a large item, then accounts payable should be inversely small. The proceeds from the former would ordinarily be applied to the payment of accounts, making accounts payable a small item. As before stated, the tendency the last few years is toward carrying open accounts rather than accepting and carrying notes for merchandise.

Are any of these overdue? Are they all for merchandise? Is any merchandise in stock and the bill not included in the liabilities?

Does the borrower take care of his trade obligations promptly and satisfactorily? Generally speaking, a concern that is large enough and in good credit enough to borrow through a commercial paper broker should be discounting all its bills in the trade, and should not be asking extension in any form nor show a large amount of accounts payable. There should be no excuse for them to issue paper to trade creditors, and the presence of bills payable to trade creditors is a sign of weakness that would be recognized at once. You can obtain very valuable comment and criticism from people in the trade who have either sold the borrower or who, perhaps, are in direct competition with him.

The mortgage debt and bonded debt are termed "capital liabilities" and together with current liabilities constitute the total liabilities of the firm or corporation. When is the mortgage due? What is the rate of interest? Is it paid regularly?

²³F. B. Snyder ante.

RATIO OF PLANT TO CAPITAL

The proper ratio of working capital to plant is another point to be carefully noted in the analysis of a borrower's statement. In general it may be said, the less plant investment, the better; because this portion of the capital is not being turned over at a profit, but, on the contrary, is continually depreciating, and is a constant drain upon the profits earned by the circulating capital. While this is the general rule, the normal ratio of plant to working capital varies greatly in the different lines of business. In a jobbing or retail business this ratio is normally very small, because in the former only a small amount of fixtures is required, while in the latter perhaps a larger amount of fixtures, but no machinery, is needed. In a heavy manufacturing business the plant may be considered fairly normal, if it does not exceed the amount of a year's sales; but if it does largely exceed these figures, it is usually found to contain more or less good will or water in its valuation.²⁴

Having a statement of the actual assets and liabilities, it becomes important to know the contingent liabilities, for these may be so great as to work disaster if they are enforced, as, for instance, the contingent liability on an indorsed note.

Contingent liabilities is one of the most important items contained in the statement—if indeed we find it therein at all. Not being our customer's own debts he may be backward in disclosing the extent to which he has endorsed paper for other persons or firms. Many houses have been ruined by the collapse of firms for whom they had endorsed much paper. Again, a firm's endorsement may be put upon notes of individual members of the firm; a very dangerous practice and one which the credit man must make note of. All customer's notes discounted at the bank figure under this head. While the proceeds of such notes are carried as cash, still they bear our borrower's endorsement, and he would be held liable for their payment.

Any firm having subsidiaries should be carefully investigated to ascertain the relationship that exists. In the Claffin failure in 1914, this was the great weakness, the unknown

²⁴Oscar Newfang ante.

liability. It had received notes from its subsidiary firms, and sold them with its indorsement, and this liability was not accurately known. And by reason of its affiliations it carried down prosperous concerns with it, and the interlocking interests were so complex that the true condition of the parent concern, as well as the affiliated ones, could be determined only with difficulty.

NET WORTH

The gradual growth of the net worth is an item which interests the banker. Unless a business is conducted at a profit, it has but little excuse for existence and less excuse as a credit seeker. If the business is successful, but the earnings are constantly drawn out, the management is neglecting to create a buffer against hard times. It may also be an indication of high living at the expense of the business, which, in the end, means at the expense of the creditors.

DEPRECIATION

A constant subject of debate among accountants is the proper method of depreciating equipment. Modern practice seems to favor carrying machinery at its actual or cost value, with new equipment added and old machinery deducted, and repairs, of course, charged to expense, while the actual depreciation is accumulated on the opposite side of the ledger, as a liability. This method is conceded to be better at least for insurance purposes. Real estate should be scaled each year to bring it down to at least its market value.

BANK CONNECTIONS

Has the borrower adequate bank facilities? This is a very important point, because if a borrower, especially in a country town, has his borrowing shut off through brokers by reason of financial depression, he has to fall back on his own banks. It is important to see, therefore, that the borrower has enough banks and enough loaning power to take care of his total requirements. The cleanest proposition is for a concern to have one or more banks with lines of credit

definitely established for its maximum requirements and then to put out its paper through the brokers for the advantage of lower money rates, leaving the bank lines open.

LIABILITIES TO CAPITAL.

The relation of the total liability to the capital deserves attention. As a general rule a man should have at the risk of the business more of his own money than that of his creditors. Again we meet with the various exceptions to any rule in credit work. The exceptions in this case are practically the same as those in the "two for one" quick assets to liabilities rule. The working capital should also be compared with the annual sales, bearing in mind the conditions of the particular business to determine whether or not the concern is overtrading. In one case a dry goods company turned its capital 3.36 times, which is rather low for this line.

ACCRUED ASSETS AND LIABILITIES

In the statement of assets and liabilities, it is but fair that any accrued but uncollected assets such as interest, rent, etc., be considered as an asset, and on the other hand, the business must be charged with accruing liabilities, such as taxes, dividends, and other accruing charges at the time the audit is made.

GOOD WILL.

The question of good will is an important one, and one that has given accountants and bankers much thought. In some companies it is a very important element, and is carried as a nominal asset; while in others it is a very large asset and of questionable value in the amount carried.

Good will is nothing more or less than the supposition that trade will follow an established course: that patrons will continue to trade at the old stand. The good will of any of the widely-advertised products is difficult to determine. Baker's Cocoa is the result of years of building up a trade; Ivory Soap is as well known as Uneda Biscuit; and Sapolio a household article.

Whether any product could crowd these out of their fields is doubtful, so long as the quality and service is maintained. And to capitalize this "tendency of trade to follow the established lines" is entirely proper. But as an asset for bank loans, it depends altogether upon what the good will is, how long established and the field.

INTEGRITY OF ORGANIZATION

The successful continuance of a business depends upon the integrity and strength of its organization, as well as upon the integrity of character in its management. The principal points to be considered in judging the strength of a business organization are its safety and permanence, harmony among the managers, and experience in the various branches of the business, manufacturing, selling and financing. A large business which is dependent for its continuance upon a single individual is a poorer risk than one which rests in the hands of several men. The sudden death or disability of the head of a one-man enterprise may seriously embarrass the business and imperil its creditors—a danger which is not likely to occur where the management rests with several capable men, all of whom will rarely be disabled at the same time.

Harmony among the officers, directors and managers of large enterprise is essential to its success. When a banker's investigations of a name reveal internal dissensions and discord, it is best not to extend credit.²⁵

THE PASSING OF A LOAN

Having an application for a loan, or a piece of commercial paper under advisement, it becomes the duty of the credit department to assemble the information for the guidance of those who will pass upon the application.

Let us suppose that the paper of Adams, Jones & Company is offered. We know nothing about them, except that it is offered by a reliable broker. It is taken under ten-days' option, in the sum of \$25,000, and the following data is

²⁵Oscar Newfang in *The Bankers Magazine*.

assembled by the credit department as bearing upon that firm:

FEBRUARY 1, 1915.

ADAMS, JONES & CO., WHOLESALE GROCERS, SMITHVILLE, N. Y.

Purchase of \$25,000 under option, January 28, 1915.

Three notes of \$5,000. Dated January 20, 1915.

One note of \$10,000. Due April 20, 1915.

SUMMARY OF STATEMENT, JANUARY 1, 1915.

Cash	\$20,000	
Accounts receivable	100,000	
Merchandise	450,000	
Total quick assets.....		\$570,000
Accounts payable	\$145,000	
Bills payable	227,500	
		372,500
Surplus quick assets.....		\$197,500
Real estate	\$100,000	
Sundries	40,000	
Net worth		\$337,500
Sales	\$600,000	
Ratio quick assets to liabilities.....		1.53

COMMENT BY CREDIT MAN

"The ratio of quick assets to liabilities is satisfactory for a grocery house. The accounts receivable are not large for a firm of this size, being one-sixth the annual sales, and are, therefore, equal to two months' sales, but should be reduced by better collection methods. The accounts payable are a trifle too large, and the firm has borrowed up to about two-thirds its net worth. The real estate is an old building, well located, but should be scaled at least ten per cent. from these figures, the property having been carried at these figures for ten years, and property in that neighborhood has not increased in value. I recommend that only \$5,000 be taken."

Then follows digests of letters received from banks that have purchased the paper, and from firms having had dealings with them, somewhat as follows:

BANK A.

1-31-15.

Says this is an old and well established house, having account with it for twenty years; never overdrawn, and never had a protest. Offer them a liberal line which is never fully taken. Borrow occasionally and pay promptly. Take out most of the profits.; men live modestly but well. Are not given to extravagance, and are liberal in charities and public matters. Borrow in the fall but clean up in the early spring. We buy direct of them and in the open market and regard them as highly desirable.

BANK B.

1-29-15.

Have bought their paper steadily when offered for the past five years. Buy all we can get. Have none now. Have confidence in management, and regard them well.

FROM THE TRADE:

FIRM A.

We sell these people all their coffee, teas and spices. Discount all their bills; never had any trouble; buy close and pay promptly.

The agency reports would be somewhat as follows:

COMMERCIAL AGENCY.

1-30-15.

This firm started in business in 1885 with capital of \$25,000. Has steadily made money. Profits allowed to accumulate in early years, but withdrawn of late. Business now profitable, ably managed, but subject to competition of a new and aggressive firm in the same territory. Partners said to be worth quarter of a million jointly, stand high in the town and own considerable real estate. Adams and Jones the only members of the firm.

The officer looks over the report and if he coincides with the views of the credit man, returns \$20,000 of the paper with a request for another offering.

Where the application is from a depositor, the information will be largely from its own banking experience, as evidenced by the average balance, average indebtedness and digest of statement as above.

Many institutions do not require their credit departments to make the report as above outlined. The offering slip is all that goes before the discount committee. Under a heading "Remarks" the department writes the result of its investigation and recommendation. However, such a report is a good thing. It condenses the information, makes it readily available for future reference, and is evidence that the loan has been given thorough attention, and does not have to be read by the committee if it is satisfied to be governed by the conclusion of the department as contained on the offering slip.

When the loan has been passed on by the discount committee, whether authorized or not, these papers are returned to the credit department, and become part of its records. If another loan from that borrower is ever under consideration the information is at hand for reference.

WHAT THE CREDIT MAN WANTS TO KNOW

Here are some questions that suggest the line of information which the credit man likes to know that the bare statement does not cover: Is the business legitimate, and is it firmly established? If a manufacturing establishment, is it one catering to a steady demand, or to some whim? (It is easy to figure out that if there are ninety million people in the United States, and if one out of every ten buys an article for ten cents that costs nine, what the profit will be. It is another thing to persuade that one to buy.) But if they all eat, it is fair to assume that if you make something they must eat, some portion of the ninety million will buy that product. Beefsteak never goes out of fashion. Is the business a monopoly, or is it subject to disastrous competition? Is the business well located and well served by transportation facilities? Can it operate cheaply, and does it? Who are the owners and how came they by the business? Are they trained men in both business and finance? Can they sell as well as make? Are they well balanced both in the selling and in the technique? Do they keep proper books of account so that their financial position may be correctly ascertained? Have they a fair idea as to the cost of operation? Do they work under patents and are the patents good and still in force? Is there litigation pending that if adverse will prove costly? Do they carry reserves for bad debts and depreciation?

COMMERCIAL PAPER

Commercial paper as commonly known may be defined as consisting of those instruments—notes of hand—which are issued by firms and corporations and sold through the medium of commercial paper brokers to banks.

Commercial paper is issued in large denominations, usually \$2,500, \$5,000 and \$10,000, runs from three to six months, the purpose being: (a) To borrow at cheaper rates than would be obtainable at home; (b) to have wider borrowing facilities; (c) to keep in reserve borrowing accommodations at the home banks; (d) to obtain cash with which to take advantage of the cash discounts offered in the trades.

Looking at it from the banker's viewpoint, commercial paper is bought for the purpose of (a) investment, when

the home demand is slack; (b) to have a wider field for lending, frequently at better rates than home conditions warrant; (c) to have paper maturing constantly—a stream of maturities which he is under no obligation to renew.

The difference between commercial paper and ordinary loans and discounts is the fact that the bank has no interest in the commercial paper, aside from its goodness, and is under no obligations to renew, either as a matter of protection to itself or as a favor to the borrower.

It is a good policy for a concern to borrow in the open market and reserve its home banks for emergencies. It can often obtain better rates in the broad market, and has the home bank to fall back upon when needed. The amounts due to home banks can be ascertained by communicating with the banks, and the discount line can be known by application to the broker, for good concerns do not shop around, but confine their operations to one or two houses, and even for a lesser rate would stick to their own broker as a matter of good policy.

There is also that class of paper consisting of notes received in trade dealings, which are indorsed and sold through brokers, and this class is known as "receivables," "two-name paper," "endorsed paper," as distinguished from the first-mentioned class known as "single-name paper." The great Claflin firm issued its paper in the form of receivables. Their debtors would pay by notes running to the firm, which the Claflin firm would indorse and sell in the market, this paper being known as "Claflin Receivables," and was highly regarded.

Single-name paper, while issued for the purpose of consummating a trade transaction, has no evidence that it will be used for such purpose. The firm ostensibly borrows to take its discounts, and only by communicating with the firm's trade connections can this be ascertained; while in two-name paper there is evidence of a trade on the face, subject, of course, to accommodation notes and other irregularities possible in mercantile dealings. The broker, by knowing the demand and supply of paper, is able to regulate the market to a considerable extent. In some places money may be in surplus, while in others there will be a dearth, and by knowing the market conditions, he can buy

where money is needed and sell where investments are wanted.

COMMERCIAL PAPER AS LIQUID RESERVES

Banks have seasonal demands. They cannot accumulate money all through the summer and keep it idle awaiting the fall demand, for this is not good banking; they, therefore, buy commercial paper in the spring and early summer that matures about the first of September, when the local demand begins to show itself, and by allowing paper purchased in the open market to mature, they have funds in hand with which to take care of their home borrowers.

The custom of buying paper in the market has not long obtained, it being formerly considered unfair to the community to take funds outside the territory; but as the advantages of commercial paper as a secondary reserve have become apparent and with money accumulating in banks faster than home demand could utilize, the custom has been growing all over the country.

Bonds were formerly regarded as the bank's secondary reserve; but the difficulty of these is, the maturity is not easy to regulate, there not being a supply of short-time bonds always available. And if longer-time bonds are bought there is no assurance that they can be sold at the time of need for their purchase price. Sometimes they cannot be sold at all, and the rates are, as a rule, lower than commercial paper will bring.

THE CASH DISCOUNT SYSTEM

The cash discount system is an outgrowth of the Civil War. At that time and before, it was the custom of a merchant to buy heavily at periodical times, making annual or semi-annual trips to the large city and there select his stock for six months or more. He gave his note, or paid upon his next visit. He was well known to his jobber and needed no other credit than his reputation and standing.

But after the war, especially in the greenback disturbances, conditions began to change. As the value of money became problematical, the amount the creditor would get at maturity became uncertain. He was willing to make a concession for prompt payment. He, therefore, sold on

"terms," payment to be made by a certain time, less a discount if paid before that time. This system has grown to be exceedingly popular, and the old method of settling by note has disappeared to a large extent. Only in a few lines, such as in lumber, agricultural machinery, etc., is the promissory note now used in any great volume. And as the cash discount custom has grown, single-name paper has come into wide usage as a method of borrowing, the proceeds being used to pay cash for purchases. Instead of the merchant giving his debtor his note he now gives him his check, and obtains the funds to make his check good from selling his paper in the market.

It is highly profitable for the merchant to take his discounts, as a simple illustration will show. Suppose the terms are 2/10—net 30; meaning that if payment is made within ten days from date of the invoice, two per cent. may be deducted. This is equivalent to seventy-two per cent. a year, meaning to say that if money were to be made at this rate, it would have to earn seventy-two per cent. a year. Let us prove the point. A merchant buys a bill of goods for \$100 payable as above. If he pays it within the period he may settle for \$98. If he were to require the \$100 to earn \$2 for him in ten days at interest, he would have to employ it at the rate of seventy-two per cent. a year; for interest on \$100 at seventy-two per cent. for the year equals \$72—\$6 a month, and \$2 for one-third of a month.

On the other hand, the seller could not make the \$2 in so short a time except by the employment of the principal at the rate of seventy-two per cent. a year. Therefore, he has lost at that rate. But he has doubtless concluded from experience that his discounts will be taken and, therefore, fixed \$98 as the selling price of the article, out of which he gets his anticipated profits; and if the discounts are not taken, he is the gainer—except he has a poor credit risk to deal with. He could just as well make the selling price any arbitrary figure and allow more liberal discounts, but the above illustrates the point in mind.

WHAT IT COSTS A RETAILER NOT TO GET CASH DISCOUNTS

In order to show retailers the high price they pay for the privilege of taking full time on their invoices, H. M. Cary

of the Theodore Poehler Mercantile Company, Emporia, Kansas, has drawn up a table of interest equivalents of a few cash discounts. It is presented in the May bulletin of the National Association of Credit Men.

According to Mr. Cary's table, one per cent. in ten days in a thirty-day bill means eighteen per cent. per annum. He gives this example: Invoice, \$1,000, thirty days net, one per cent. for cash in ten days. If the merchant pays in ten days he receives \$10 cash discount which, in effect, is the interest the wholesale house pays him for the use of \$1,000 for the twenty days' unexpired time. This is at the rate of eighteen per cent. per annum, for the interest on \$1,000 for twenty days at eighteen per cent. is \$10. Other examples are given as follows:

Invoice \$1,000, terms sixty days net, 2 per cent. for cash in ten days; discount \$20, unexpired time 50 days, interest equivalent, 14 4-10 per cent. per annum.

Invoice \$1,000, terms six months net, 6 per cent. for cash in thirty days; discount \$60, unexpired time five months, interest equivalent, 14 4-10 per cent. per annum.

Invoice \$1,000, terms four months net, 4 per cent. for cash in thirty days; discount \$40, unexpired time three months, interest equivalent, 16 per cent. per annum.

Invoice \$1,000, terms six months net, 6 per cent. for cash in sixty days; discount \$60, unexpired time four months net, 6 per cent. for cash in sixty days; discount \$60, unexpired time four months, interest equivalent, 18 per cent. per annum.

Commenting on the table the bulletin says: "The above few examples will show what a heavy disadvantage the retailer works against when he takes full time on his bills. He could borrow money to discount his purchases and make six per cent. to ten per cent. on the transaction, besides keeping his business in hand better than he possibly can when he owes a large number of wholesale houses."

COMMERCIAL PAPER AND THE FEDERAL RESERVE BANKS

The ostensible purpose of single-name paper is to take advantage of these cash discounts, and all well-managed concerns endeavor to do so, and failure is indicative of trouble. It is profitable as has been shown, and money cannot be made easier than by taking these concessions. The danger lies in the unscrupulous paper broker, who urges his client to put out more paper than is necessary for the business, in order to take advantage of a cheap market, and this leads to overtrading and over-extension.

The enactment of the Federal Reserve Law, which had for one of its primary purposes the rediscount of commercial paper, led to a widespread interest in this subject, and a division of opinion as to the relative merits of each class of paper, single-name and two-name, the latter called receivables. The latter form of paper more nearly resembles the "acceptance" in use in Europe, since it carries a double obligation, which single-name paper does not.

The definition of paper that would be acceptable to the Federal Reserve Banks was awaited with uncommon interest on the part of the banking fraternity. It affected every bank that expected to rediscount. It affected business in the discrimination that would be made against either class. It had in it the possibility of revolutionizing American business methods. It had danger.

Clearing-houses and bankers had been appealed to, to suggest what kind of paper should be selected. Views innumerable were advanced, for and against both kinds, but one thing was agreed upon, and that was, in accord with the intent of the Federal Reserve Act, the paper should arise out of a business transaction—an exchange of commodities.

Just how this was to be ascertained was the problem. Some clearing-houses favored a statement on the paper that it was for such a purpose, but the question of negotiability arose. Others made it a part of the bank's business to ascertain this and to certify to it. But on the tenth of November, 1914, the Federal Board issued its definition and description of the paper it would receive for rediscount. No doubt the war conditions had much to do with the liberal definition, and it was probably framed in the light of present events.

The board lays down the basic rule that the paper should arise from a commercial transaction. It should be self-liquidating. It should, as the board puts it, "represent in every case some distinct step in the productive or distributive process—the progression of the goods from the producer to the consumer. The more nearly these steps approach the final consumer, the smaller will be the amount involved in each transaction as represented by the bill, and the more automatically self-liquidating will be its character."

But before treating the subject of the board's ruling, let

us review the advantages and disadvantages of each class of paper.

In the single-name paper, economy of effort is realized. It comes in large and uniform denominations. Take a typical case. Here is a merchant, let us say, with \$300,000 of debts, representing 3,000 invoices. He borrows \$300,000 on sixty \$5,000 notes and pays by check. If he were to give his creditors his notes of hand—two-name paper—he would issue 3,000 separate pieces of paper, have to record their details and arrange to meet them when due.

His bookkeeping would be much congested by such a process, and so would the systems of all who handled the paper, particularly the banks.

As before suggested, single-name paper is a development arising out of the desire of traders to shorten the time of settlement, and in order to do so, concessions are given if payment is made before a certain date. It has placed the country on practically a cash basis. It has shortened the term of credit. Moreover, the customs have become so firmly ingrained upon the business interests of the country that to change them would be quite impossible.

The safety of single-name paper is largely assured (a) by the standing of the broker, who is supposed to make careful study of the risk for his own sake and to handle only high-grade paper. He should have an audit, and a statement, as a protective measure. He has a reputation to sustain. (b) By analysis of the statement and correspondence with banks that have handled the paper.

The losses have been trifling in those banks where single-name paper has been favored—so small as to be inconsequential. While the losses in single-name paper have not been large, there have been, however, failures which have been serious in this respect, notably the failure of the Westinghouse Company and the Pillsbury Flour Company a few years ago. The possible losses from single-name paper are classified by Mr. Owen Shepherd of the International Paper Company as follows:

1. *Dishonesty on the part of the broker.*

(a) In selling forged paper (This is a rare occurrence); (b) in putting out paper of known bad concerns; (c) through collusion with those who desire to issue paper dishonestly.

2. *Inability on the part of the broker.*

(a) In being misled as to his client's standing; (b) in engaging his customers to issue more paper than they are justified in doing; (c) by accepting improperly authorized paper.

3. *Dishonesty on the part of the maker.*

(a) Through false statements; (b) through flotation of paper not properly recorded; (c) through manipulation of the books, keeping duplicate sets, or by other means preventing public auditors from ascertaining full knowledge of the indebtedness of the maker.

4. *Inability of the maker.*

(a) By undertaking larger business than his capital warrants; (b) through over-expansion due to a desire to speculate in his business by overbuying for a prospective rise in prices or otherwise.

5. *General over-expansion in many lines which might lead to panic and financial ruin.*

6. *Failure due to apparently unavoidable circumstances.*

TWO-NAME PAPER

While single-name paper is for the purpose of liquidating an account receivable, two-name paper is the embodiment of the account receivable. It settles a debt. It is drawn in odd amounts and bears prima facie evidence of its purpose. It may, of course, be "kited"—one firm giving its note in exchange for that of another, but collusion is possible in all business dealings.

Inasmuch as "receivables" carry the strength of two names, and have evidence of the trade transaction out of which they arose on their face, they are most desirable. But these instruments are not so readily obtained as the single-name paper, the latter, according to commercial paper men, predominating to the extent of fully ninety per cent. The endorsement of the payee not only authenticates the note, but adds strength to it.

The Federal Reserve Board indicates its leaning to two-name paper when it says: "Double-name paper drawn on a purchaser against an actual sale of goods affords from the economic standpoint of view, prima facie evidence of the character of the transaction from which it arose. Single-

name notes, now so freely used in the United States, may represent the same kind of transactions as those bearing two names. Inasmuch as the single-name paper does not show on its face the character of the transaction out of which it arose—an admitted weakness of this form of paper—it is incumbent upon each Federal Reserve Bank to insist that the character of the business and the general status of the concern supplying such paper should be carefully examined in order that the discounting bank may be certain that no such single-named paper has been issued for purposes excluded by the act, such as investments of a permanent nature.”

The open account selling, which is a development of the single-name paper, makes possible a postponement of payment, the obligation of the open account being easier to delay in its payment than a negotiable instrument. The assignment of the book accounts—the most liquid asset of the firm next to cash—is also possible, and, if so, the issue of single-name paper makes a weakened state of affairs. Borrowers have been known to have borrowing accounts in twenty-nine institutions in New York State and others have borrowed in thirty different names.

There is this to be said, however, that in liquidating two-name paper it is more difficult to renew a note than to issue paper in the market. If the seller will not give an extension, the extended two-name paper cannot arise. It must be paid if not extended, or some other lender found who will take it, unless the paper is to be sold through the brokers and thus have the open market as the field. Single-name paper is never given to the seller—he gets the proceeds in form of a check—for to issue to him single-name paper would make it double name when negotiated.

Paper that is paid by the issue of other paper is unsound. It should be paid from the proceeds of the merchandise which it carried. It should liquidate itself. Fixed loans should not be financed from the proceeds of marketed paper. The endeavor of the Federal Reserve Board has been to eliminate this risk. And if several brokers are employed by the same firm, there is no effective check on the amount of paper issued.

In a brief filed with the Federal Reserve Board by the

Merchants Association of New York concerning the quality of paper eligible for rediscount, it was said:

"All negotiable commercial paper is of one of two classes: (a) bills of exchange, or orders to pay money, and (b) promissory notes, or promises to pay money. The two classes may be further distinguished by the time of payment, which is either on demand or at some fixed future date. Checks and sight drafts are demand bills of exchange, differing only in form. A bank note is a demand promissory note. The questions of credit involved in these forms of commercial paper do not involve a postponement of payment, and so far as our banks are concerned no action of the Federal Reserve Board seems to be needed to work any changes in the customs surrounding their use, which adequately protect all temporary holders from loss by their acceptance.

Unsecured promissory notes bearing interest, and payable "on demand," while purporting to be call loans on personal security, are for the most part loans repayable at the pleasure of the borrower. Collateral notes payable at a fixed date or on demand, and secured by Government bonds or notes, are expressly relieved from the prohibition against notes based on a pledge of investment securities and their quality with respect to ultimate payment is well established.

There remain to be considered, therefore, only those varieties of time paper based on personal credit or on merchandise. These are:

1. The bill of exchange payable at a specific date after sight, and accepted by the drawee—one variety of bills of exchange. It may be secured by bill of lading for merchandise which may be released or not released to the drawee upon acceptance.

2. The promissory note in settlement of sales—endorsed by the seller.

3. A note or draft endorsed for accommodation.

4. The promissory note secured by pledge of merchandise.

5. The unendorsed promissory note—single-name paper.

1. Bills of exchange drawn for acceptance at thirty days to six months' sight either with or without bills of lading for the merchandise attached, are now rarely used in the

inland trade. They would be applicable to transactions in the great staples such as cotton, wheat, corn, oats, and other agricultural products. But transactions in these staples have been freed by the produce exchanges from time credits, and are now very generally on a cash basis. Were there a supply of this class of paper it would doubtless form one of the safest as well as fluid forms of investment for Federal Reserve discounts. Bills of exchange, based on sale transactions, are normally self-liquidating.

In connection with manufactured commodities such as dry goods, groceries, hardware and the like, bills of exchange became obsolete many years ago owing to a variety of causes which may be here summarized, viz.:

(a) The reduction of the customary term of credit from six or eight months to ten, thirty or sixty days.

(b) Uncertainty of the amount due by reason of discounts offered for prepayment, by which the term of credit is made flexible, at the buyer's option. The general effect of this process is that all houses in high standing finance themselves so as to pay cash for all their purchases.

(c) Uncertainty as to the amount to be paid owing to the substitution of implied warranties of the goods sold in place of the old rule of caveat emptor.

(d) The change in the custom of buying, made possible by improvements in transportation during the last thirty years, whereby instead of making a few large shipments of merchandise, buyers now make a large number of small purchases. While the average size of the bills in the sales of large wholesale houses in the seventies was over \$1,000, it is now less than \$100. It is not practicable to settle accounts of such small size with bills of exchange. (See appendix.)

(e) The facilities extended to the country merchant by local banks, which have everywhere multiplied. These banks find a profitable use for their funds in making loans to local merchants who are thus enabled to buy merchandise advantageously on the shorter terms now prevalent, and to avoid the long credits which in former days were furnished by the seller of the goods and paid for in the price. Credit prices are always higher than cash prices.

For these reasons the bill of exchange has become obsolete in nearly all branches of trade in manufactured goods, except where the conditions above referred to are upset by

forced trade sales at auction. In this case, notes or bills are given in payment mostly by second and third-rate debtors, all others preferring, in ordinary times, to settle on short time with cash.

2. What is true of the use of bills of exchange is also true of the use of promissory notes in settlement of trading accounts receivable, and for the same reasons. At present such promissory notes as are given for merchandise accounts are quite well understood to represent settlements of overdue accounts receivable or extensions granted to weak debtors; strong houses hesitate to endorse and sell these notes knowing that they are the least liquid of all their receivables; and that a transaction of this kind, disclosed, will besmirch their own credit. By average from one-quarter to one-third of such notes go to protest and are paid by the endorser.

Promissory notes, however, are given by consumers in large volume in part settlement of debts for farm machinery, automobiles, wagons, tools, etc. A large part of these notes are very good; but being drawn by persons of meagre bank credit, and not under the influence of business habits, are not always paid promptly at their maturity. Such notes are frequently endorsed and used as collateral for the promissory notes of their holders. They give a self-liquidating character to the notes which they support, and should be excellent collateral security when protected by sufficient margins to forefend the average percentage of default. They would seem to fall within the compass of the broad definition of the second paragraph of section thirteen.

3. Promissory notes endorsed by sureties for accommodation form the great bulk of the double-named paper held by our banks. Such accommodation paper is good provided it is not used as a means of financing the inactive assets of both maker and endorser. It does not represent a real transaction between them. As a means of providing capital at the start for able men of limited means it is a device of value. Notes of such men are dependent in a much larger degree than any other kind of paper upon the character and ability of the maker. He gets the endorsement because he needs the third element of good credit—capital. The valid foundation for the prejudice against accommodation endorsement is not the fact that usually a note so endorsed represents a future rather than a past transaction; for a past transaction is just

as likely to be foolish, and, therefore, not to pay the note, as a future transaction. But they are clouded by the question of the *quid pro quo* given to the accommodating endorser. If a reciprocal endorsement is given in return, and secretly, there is the certainty of inflation by the production of two notes where one only is needed by trade demands. They are connected in the lender's mind with the practice, of dubious morality, of not acknowledging the endorsements as liabilities, until the maker has defaulted. Nobody likes to lend money on mysteries.

When the endorsement is that of a concern affiliated by common ownership, it adds nothing to the responsibility behind the note, but may mislead the uninformed. It is only where an endorsement or acceptance is from a party thoroughly independent of the maker that it is of any value; and in such case the nature of the consideration should be disclosed in order to forefend distrust. The safety of such bills depends entirely upon an intimate knowledge possessed by the discounting bank of the character, ability and means of both parties to the transaction, and they are, therefore, unfitted for open market transactions. And when made on a large scale, as in a recent deplorable instance, they are a distinct menace to financial weal. They are in no sense self-liquidating.

4. Promissory notes secured by merchandise are mentioned specifically in the latter part of this section of the act. Unsold merchandise is of undeterminate value, and a note based upon it is no more self-liquidating than the merchandise itself. Like all other speculative notes they require a continual scrutiny of the markets for the merchandise by which they are secured. Such notes are often given by manufacturers for purchases of raw materials, in which case they are generally paid off when the raw material is drawn from warehouses and used in production. Notes secured by merchandise are not self-liquidating, as they require the effort of selling to provide the funds wherewith to pay.

5. Single-name paper. Our modern American methods of cash or short maturity transactions, modified to a degree by customs of delivery of certain classes of merchandise in advance of the selling season, give rise to vast amounts of book accounts receivable, payable at fixed dates, but subject to the indeterminate influences of flexible terms of credit and

of implied warranties, the two collectively producing a mean variation of between two and three per cent. These being incapable of the certainty prerequisite to note settlement, it has become the custom of the wholesaler to obtain capital for further operations through the sale on the open market of his plain promissory note for a round amount, adjusting its maturity to that of his book accounts receivable, so as to give a self-liquidating quality to his own notes.

In its current form it represents a past transaction just as much, if not so specifically, as a bill of exchange. Such paper has always been in demand from bankers and in times of trouble the self-liquidating quality transmitted from the book accounts behind it has made its recurrent maturities the chief cash reliance of the banks, taking the place of the secured call loans which, theoretically liquidable on demand, are at such times congealed by the stoppage of markets, and unsalability of collaterals. No moratorium has ever been demanded for the single-name promissory note, even when the banks generally have failed in their obligation to pay cash to their depositors, or gold to their note-holders; nor even when its makers may have asked for delay in the settlement of their book accounts payable. Such notes can be put in the status of two-name paper only by accommodation endorsement.

If required by law, or by regulation of the board, two or three-name paper will be manufactured to order. It will then represent the obligation of the less scrupulous of traders, and will be subject when made in a large way to the disadvantages adherent to accommodation endorsement for purposes of finance.

But it is clear, from the nature of the mercantile promissory note, endorsed or unendorsed, that it is either issued or drawn for "commercial purposes or the proceeds of which have been used or are to be used for such purposes," and so within the inclusions of the act.

DISCOUNT MARKET

The value to our business as well as to our finance of an open discount market, such as prevails abroad, and of an entrance into the international discount market, is not to be underrated, even though the immediate importance of the

question at this crisis may seem small. But it is clear, if our analysis of the existing stage of development of business custom in the United States is correct, that there is no way by which inland bills of exchange, such as foreign dealers are accustomed to, can be created through purely business transactions, out of the first-class obligations now current and likely to remain current in this country. If forced by law or regulation, fictitious situations can doubtless be created, which will give rise to specious imitations of the article desired; but with such transactions the more honorable part of the commercial community will have nothing to do. The only result of such attempted regulation would be to discourage straight dealing, and to create a second-class security in place of a prime obligation such as now exists.

Out of this dilemma there are two avenues of escape. The first is the education of the foreign bill broker to our credit methods; the second is the open acceptance or accommodation endorsement for a consideration of inland trade drafts by banking institutions, such as has already been begun by several of our leading financial institutions. This practice affords the guaranty of large and imposing capital to a finance bill capable of currency in any market of the world. Of course, in case any Reserve Bank should wish to use the international market it could make bills of the very highest class by adding its endorsement to the contents of its portfolio; a process which if not now legalized might easily be the subject of legislation in the future.

It is plain from the foregoing analysis and description of the various kinds of commercial paper currently used in transactions described as admissible under the act, that the final criterion of any given piece of paper is the credit of its maker; that credit is dependent in part upon the character, in part upon the ability, in part upon the capital of the man or men who accept the responsibility for it by their signatures. As to whether any given piece of paper is worthy of discount by a Federal Reserve Bank is a question which must be decided by the officers of the bank itself. They have every means of arriving at a judgment on the question involved. They are usually close enough to the transaction which it represents to warrant a valid judgment.

Considering the past success of our banking system in selecting notes of the best class for their portfolios is it not

likely, at least at the start, that if unhampered by any regulations, the directors of the Reserve Banks are allowed to discount for their banks those kinds of paper with which as bank officers and as merchants they are most familiar, the best results will presently be attained? In case of any exception to this probability, the Reserve Board has three representatives on the directorate of every Reserve Bank to warn it of reckless conduct or of impending trouble. Trade customs which have been built up by generations of wise and successful business men and bankers, in the slow process of adapting their methods to necessary economies in distribution, and to the needs of the seventeen hundred thousand firms, individuals and corporations actively trading in this country, cannot wantonly be overturned without peril both to the economic and moral health of the business and banking structure. And for these reasons, we urge that in exercising your right of determination and definition, or withholding from the present exercise of that right as you deem most proper, you will agree with us "that commercial paper in the present form and use be accepted by the Federal Reserve Board from member banks for discount and currency issue purposes."

APPENDIX

Computation showing result in terms of commercial paper issues and of office detail, of changing (a) the present short-time system of settlement in sales of manufactured goods to (b) that of settlement by four months' bills of exchange.

The merchandise is supposed to be, at first cost, of \$12,-000 annual value, distributed from manufacturer to wholesaler at the rate of \$1,000 per month in two equal shipments of \$500 each; and from wholesaler to retailers, with twenty per cent. gross profit, also in equal monthly installments in forty shipments averaging \$30 each.

A. On present terms	Notes Created	Debt Created
Constant debt from wholesaler to manufacturer, open acct...		\$500
Note of manufacturer to carry this debt with 20 per cent. margin	\$400	
On average of forty days, constant debt from retailer to wholesaler		1,600
Note of wholesaler to carry same with 20 per cent. margin..	1,300	
Constant debt created, notes and open accts.....	\$1,700	\$2,100
In one year, total of six months paper, pieces created.....		4

B. On four months credit settled by bill of exchange or note

1 Transaction between manufacturer and wholesaler, due continually 4x1000	4,000	
2 Transactions between wholesaler and retailers, due continually 4x1200	4,800	
Constant debt created		\$8,800
Notes needed to settle debt from wholesaler to manufacturer, 8, of \$500 each equals.....	\$4,000	
Notes needed to settle debts from retailers to wholesalers, 160, of \$30 each equals.....	4,800	
Notes constantly in circulation.....	\$8,800	
In one year, total number of pieces created of four months paper, 168x3 equals		504
Results compared:		
Note settlement basis—paper outstanding.....	Amount	Pieces
(Notes annually required).....	\$8,800	504
Present settlement basis—paper outstanding.....	1,700	4
(Notes annually required).....		
Increase	\$7,100	500
Increase in amount of outstanding paper.....	417%	
Increase in annual office operations.....	12500 per cent.	

It will be observed that under present terms the amount of paper created to carry the entire series of transactions is *less* than the total amount of debt created by such transactions, while under the bill of exchange plan the notes are *equal* to the debt created. This means a lowering of the self-liquidating quality of the bill of exchange, as compared to the promissory note, with margin, based on book accounts receivable.

THE COMMERCIAL PAPER BROKER

The commercial paper broker is a development of the last fifteen or twenty years. His business is now enormous, covering the whole country, both in buying and selling paper. He has a finely organized credit department, and a body of trained salesmen. He is the go-between for the borrower desiring accommodation and the banker desiring investment. He fulfills a very important and useful service in the economic scheme. He knows where paper can be sold. He knows where paper can be bought. He "makes" the money market, or at least knows where it is.

At first he was strictly a broker. He got his commission for selling, and paid for the paper only when sold. But he has grown to such proportions and is of such wealth and with such good banking accommodations that he can now send his check upon receipt of the paper, less his commission, usually one-quarter of one per cent. for three months' paper. In many cases he now buys the paper outright, pledging it as security with his bank, if need be, or, as is the case in a

few instances, is strong enough in his own capital to pay outright for it. If he has no market he may advance on the paper; or if the market is too high, he may do likewise, and sell when conditions are better.

The broker sells for cash, but often under a week or ten days' option. He does not indorse the paper, nor guarantee its payment; but he does morally and in law guarantee that it is regular. He has the facilities to determine this. His credit department has records of every borrower, who should sign, and under what conditions, and the fact that he offers it is guarantee of its genuine character and of his opinion as to its worth.

It has been discovered that firms which could not sell their single-name paper, have, at the instigation of unscrupulous brokers, drawn notes in odd amounts, and exchanged them, each indorsing for the other, and when offered on the market as receivables, they have all the earmarks of legitimacy, but are accommodation paper, pure and simple. Of course such a firm should be eliminated from the loaning list as soon as this is discovered, and no reputable broker will handle their paper.

Competition has, of course, brought some undesirable elements into the field, but as a whole the commercial paper broker is of high character.

BUYING PAPER ON OPTION

Many banks buy on option running from a week to the date of the next board meeting. Paper so bought is put under examination and if it does not meet full approval is returned. When returned the interest earned during the time the bank had the paper is, of course, paid. Banks dealing with one or two houses will, in the course of time, establish favorable relations and deal in all fairness one with the other.

The average banker is not in a position to judge a risk a thousand miles away. He cannot analyze a statement; he depends upon his city correspondent to select his paper and buys on the latter's recommendation. But it requires no more ability to judge foreign paper, than it does to judge a loan at home, provided the two are analyzed from the same data. The concerns may be larger and, therefore, a little

more difficult to pass judgment upon, but the principles are the same. But a bank may select a few well-known names and becoming familiar with these make its purchases accordingly.

Whether a bank buys on its own investigation or on the advice of its correspondent, it should make the research as a matter of knowledge, and cover practically the same ground as its correspondent has covered in order to recommend the paper. Paper offered by the broker is accompanied by a statement of condition, with names of banks that have bought the paper, and trade references. The banker should analyze the statement, communicate with the references, and, in addition to suggestions already made, observe the following:

The broker—Is he well known, well established, conservative, and offering the best names on the market? Is he morally and financially responsible? Is he merely a broker—an offerer—or does he buy and sell outright? Is he a strong man? The city correspondents will advise on this point.

Is the business of the borrower a substantial one? How old? Is it a staple line? Is it a different line than you loan to locally? Has the borrower ample capital? What is the purpose of the paper offered? Is the management honest, capable and energetic? You must know that the business is administered by brains, or it is not a safe risk. No plungers, or get-rich-quick propositions, and the men must know economy and practice it. Does the statement analyze well? Does the trade think well of the concern? What do the local banks say? What do his competitors say?

Buy of large concerns, those having total assets of, say, half a million or more. Scatter the risks. Check carefully through banks having held the paper. Check through the trades. Buy only where the margin of safety—assets to liabilities—is at least two to one, except it may be in such lines as meats, etc., where a less margin is permissible. Buy paper of firms which have been recently audited by certified public accountants. Buy of established firms dealing in staple products and not those arising from fashions and luxuries. Eliminate the fixed assets entirely from the credit statement and regard them only as backbone to strengthen the credit structure.

It is well to classify paper by States or districts, and for this a loose-leaf ledger is used. The name of the city, town or State is placed opposite the months of the year running across the page. Each State may be given a section in the book and the various places separate leaves, so that the exact amount of paper in each large city will be known.

Paper held may also be classified by industries, so that the risk in each line may be known; for what will affect one line will not affect another. A good season in one industry may be a poor one in another, and it is well to have the lines scattered as to industries as well as to sections.

The location is important. The retailer should be in a good shopping district, the manufacturer near good shipping facilities. The latter's transportation costs are a main factor, both as a saving in freight and also in cheapness of raw material. Labor supply and living conditions affect manufacturing, while the appearance of the store, the stock, and the general aspect of the place are important in selling goods, and have their bearing on the credit risk.

As a rule, not more than from one-fourth to one-third the excess of quick assets over quick liabilities is considered the limit of borrowing, where the ratio of quick assets to liabilities is two to one. The credit is rapidly restricted where the ratio is less. Where the assets are practically cash, as in cotton or grain, the ratio may be larger with safety.

It is the policy of some firms to clean up and go out of debt at various times, and while such concerns as meats and groceries will have a steady output of paper, because of the steady trade, such a line as millinery, which is seasonal, should clean up when the selling season is over and the stocks have been turned into money. Likewise wool. It is all bought in a few months, but sold throughout the year, and so wool debts should grow less and less as the season wanes.

It is important to know the borrower's annual sales in order to know how often he turns his capital over. If the capital is turned but twice a year it indicates slow sales; but if turned six times it means that one dollar does the work of six, and costs the price of one. The business is liquid only as it turns the stock, bringing in a constant stream of new goods and money, and getting rid of the old.

It is told of the late Benjamin Altman that he had as

a settled policy the quick moving of goods. An article was placed on sale at its regular selling price. If it did not move quickly at that price, it was reduced. If then it did not move, it was marked down every Friday until it sold; and such a policy resulted in quick sales, and no dead stock.

The loan to a manufacturer is for the purpose of bridging the time between raw material and finished product, and should liquidate itself when the material is turned into finished form. Loans to farmers are for the purpose of planting, fertilizing and harvesting and should liquidate themselves when the harvest is gathered.

A wholesaler who turns his stock six times a year should not borrow over one-sixth of his sales, and his terms of credit should not be longer than his terms of sale. Loans to a retailing merchant are to enable him to carry his stock until sold, and if the stock is liquid and his sales quick, and his management active and aggressive, he should promptly liquidate his debt; but if he buys unseasonable stock, unsalable stock, and has poor selling methods, he cannot pay, for goods on the shelf never pay bills.

ANSWERING CREDIT INQUIRIES²⁶

Much of the credit information is obtained by correspondence. In writing the answer to a credit inquiry, you are generally justified in assuming that your correspondent, unless he has indicated special information desired, wants to know about the same things you would under similar circumstances. A well balanced letter gives first, a brief history of the business, its form, whether firm or corporation; if the first, the members; if incorporated, the date, State laws, authorized and paid-in capital, and essential facts regarding important changes, special processes owned or conditions which give the concern an advantage or operate against it.

The next paragraph may be devoted to the consideration of the financial standing. If you have figures which can be used without breach of confidence and the nature of the inquiry indicates that your correspondent does not have them, it is well to briefly summarize the statement. If the subject of your letter sells paper in the street and the inquirer

²⁶F. B. Snyder ante.

would ordinarily have a statement furnished by the broker, it is well to make such comment on the various items as your investigations justify.

In writing regarding one of your own customers, a brief explanation of some unusual feature in his statement will often clear up a vexing point and make a sale of his paper.

The third paragraph is devoted to a summary of the results of such bank and trade investigation as you have made and is complete opinion of other people regarding the name. The letter may well be concluded with a short explanation of your own opinion and your attitude toward the risk.

REDISCOUNT OF PAPER IN FEDERAL RESERVE BANKS

Commercial paper will, under the Federal Reserve System, have added usefulness and dignity, in that it will be readily discounted by the Federal Reserve Banks and will form the basis of the Federal Reserve notes.

In defining commercial paper the Federal Reserve Board announced certain fundamental principles. In brief they are:

That no bill shall be admitted to rediscount by a Reserve Bank the proceeds of which have been or are to be applied to a permanent investment. Maturities of discounted bills should be well distributed, so that a Reserve Bank should be in a position to liquidate one-third of all its investments within thirty days. Bills presented for rediscount should be "essentially self-liquidating," which as the board explained means that they should represent some distinct step in the productive or distributive process and be of such character that it is reasonably sure that they can be collected at maturity.

In addition to these principles the board requires that such paper be indorsed by the member bank offering it for rediscount; that the indorser bank waive demand notice and protest; that such paper be issued or drawn for agricultural, industrial or commercial purposes or the proceeds of which have been so used; that if in the form of acceptances they must be based on transactions involving the importation or exportation of goods and have a maturity of not longer than three months. Acceptances must be indorsed by a member bank, and the total amount offered by any member bank shall not exceed one-half its paid-up capital and surplus.

REAL PROPERTY STATEMENT

for First National Bank, Jamaica, N. Y.

Owner.....Deed recorded.....

Location.....Size of lot.....

Character of building.....Value of lot.....\$

Annual rental \$.....Value of building.....\$

Assessed value \$.....

Total.....\$

Mortgages

(1) Amount.....\$

Held by.....

(2) Amount.....\$

Held by.....

(3) Amount.....\$

Held by.....

Total mortgages.....\$

Equity.....\$

Bank's Appraisal

Signed.....

Land.....\$

Date.....

Buildings.....\$

Appraised by

Total.....\$

Date.....

BORROWERS' ASSETS FREQUENTLY CONSIST LARGELY OF REAL ESTATE EQUITIES. THIS FORM SHOWS THE VARIOUS DETAILS IN CONNECTION WITH REAL PROPERTY THAT ARE ESSENTIAL IN ARRIVING AT A CORRECT VALUATION.

The board also announced that for the present it has fixed the limit which a Reserve Bank may rediscount paper "for agricultural purposes or based on live stock" having not more than six months maturity at twenty-five per cent. of the capital of the bank. This limit may be increased in agricultural districts in time of need.

Temporarily certified public accountant's statements will not be required, but it will eventually lead to this. The statement must be under oath. It should describe the business. It should contain the balance sheet and profit and loss account. Assets should be divided into quick and liquid assets, and liabilities likewise. Short-term paper should not be sold against permanent improvements. The statement must show the maximum amount the firm expects to borrow in the market. Consent of the member bank must be obtained if this limit is exceeded. The affixing of the stamp (page 592) is equivalent to a declaration that the statement has been analyzed. Notes, drafts and bills of exchange which are issued or drawn for the purpose of carrying or trading in stocks, bonds or other investment securities (except bonds and notes of the United States) are clearly excluded. The act further excludes notes, drafts and bills of exchange covering "merely investments," and from this point of view are to be excluded all bills whose proceeds have been or are to be used in permanent or fixed investments of any kind. Agricultural, industrial and commercial purposes cannot be held to include investments in land, plant, machinery, permanent improvements or transactions of a similar nature. Bills must arise out of actual commercial transactions, and the proceeds must have been used or are to be used for agricultural, industrial or commercial purposes. They are not eligible when drawn to cover merely speculative investments.

DEDUCTIONS OF A CREDIT MAN IN ANALYZING BUSINESS STATEMENTS²⁷

No department of business administration offers a broader or more inviting field than the credits; for in the administration of a credit department, all that a man may know of men, business and business methods can be applied

²⁷Address by the author before Baltimore Chapter, American Institute of Banking, January 7, 1915, which summarizes and applies the foregoing principles in the analysis of credit statements.

in full measure. The credit department is a department of opportunity and applied knowledge. The credit man meets the executives and his work is executory. Whatever he accomplishes is quickly noticeable and his work gains immediate recognition. It, therefore, is attractive from the standpoint of its possibilities. Inasmuch as one of the fundamental functions of the bank is to loan money, and its profits come from loaning money safely, the credit department becomes largely responsible for the success of the institution.

QUALITIES OF A CREDIT MAN

The individual who presides over this department must have certain qualities that are essential. First, he must have due regard for system, for the information must be so arranged as to be quickly obtainable and complete when it is wanted. He must have a broad knowledge of business methods and practices. He must know the terms of business and the state of business. He must know trade secrets—not to give them away, but to use. He must be somewhat of an accountant, for unless he has the analytic mind that accountancy develops, he cannot make proper deductions. He must know how books are kept and how to keep books. He must be a surgeon—able to dissect, and a physician—able to prescribe.

He must have the “credit sense”—the detective’s instinct, to quickly perceive a clue that may begin with a button and end in a conviction. He must know something of law—the law of collections, of negotiable instruments, of bankruptcy. Like a good trial attorney, all that he may know will come into play sometime and somewhere. His work is not like much of the work in a bank, a daily grind; for while each day has its duties, and each day its problems, to-day will not be a yesterday, nor will to-morrow be another to-day.

THE CREDIT MAN’S TOOLS

The tools with which a credit man works have become quite as much standardized as the carpenter’s saw and hammer. First, of course, his brains. While every workman needs a proper proportion of gray matter, the credit man needs a generous supply, for in many instances he will have no one to tell him what to do. And the gray matter should

be well polished by study and well nourished by exercise. He can acquire much of the needful in his calling by tutoring under the slow but thorough schoolmaster, experience.

The deductive ability of the credit man will be used in various ways, but principally in analyzing men and figures. Here he can "use his head" to advantage. He must know men. He must know human nature. He must know that certain classes of men are good or poor risks, and why. He must know what men, as a class, do under certain conditions. He must be a good mixer and a good artist at painting mental pictures. He must be a good tailor and able to take correct measures. It would seem that the collar and the tie, the jewelry and the clothes, have nothing to do with credit; yet the credit man will tell you it does. The man careful and tasty about his dress will be likely to be careful about other things. He who is reckless in spending money for pleasure may be reckless in spending money in business. Big traits manifest themselves in little things.

The next in the list of tools are the recognized agency reports. Not that they are more important than other tools, but they are the foundation for much of the credit work. These agencies are so well established and cover the field so thoroughly, that they are used everywhere by banks and business houses as commonly as the fountain pen. The two leading agencies classify and rate practically every business house in the country, and, supplemented by the agencies that report on the more personal side of individuals, they afford the beginning of every credit investigation. To the published ratings are added special reports, that go into minute details regarding the person, his habits, his record, and other information concerning the moral and financial standing of the applicant.

Supplementing this still further are the reports of banks, and firms in the trade, which have intimate knowledge of the party, experiences in lending money and dealing in general with him, and can state with authority the habits of pay.

Next come the published reports of mortgages, judgments, bankruptcies and failures, assignments, etc., which are all important as danger signals.

Then there are those underground channels of information, gossip, bits of information gathered from various sources, all bearing upon the credit risk.

Lastly and by no means the least important, is the statement of condition, which, unless made by an independent audit, has well been termed "the borrower's estimate of himself." This may be the beginning from which all other sources of information radiate, or the focal point to which



FOUR-DRAWER STEEL CREDIT FILE

they all gather. But whether the beginning or the end of the inquiry, the statement is the one factor that is coming to be given its proper place in the credit scheme. All the above finds lodgment in the credit department files as tools for the credit man's work.

Whether the credit department is a finely organized part of the bank, with its chief, its clerks and its files, or one of the many nooks in the brain of a busy bank official, the purpose of the credit department is twofold; (a) to assemble information, and (b) to use it.

THE DEDUCTIVE PROCESS

The first deduction which the credit man will insist upon being satisfactorily established is that the applicant is honest. This may seem a trifle threadbare; but it is a truth that is admitted by all who understand credit science, and is recognized as an essential, if not the essential element. This honesty does not necessarily mean that the applicant shall have all the Puritanistic virtues of the ethical code of long ago, go to church and say long prayers—for some credit men prefer that he should have his religion on the inside and not as an adornment. But he must be a man of strict integrity, as integrity goes in business, deal fairly, and, to quote the great commentator Blackstone, “live honestly, harm nobody and render every man his due.” He must give full measure, do no tricky thing, fail only because there is no other way, and have that reputation as a business man which stamps him worthy of his citizenship.

In the second place he must be able as well as honorable; he must be a man who can. Thirty per cent. of business failures are due to lack of ability. The art of management is a fine one and all cannot acquire it. Business cannot run itself; there must be the “know how” behind it; and this know how cannot be learned at the bank’s expense. It must preferably be learned in the school of experience as an underling, else as a superior he may lose his own capital and that of others while acquiring the ability to administer.

Thirdly, there must be the assurance of adequate capital, for thirty per cent. of the business failures are due to lack of capital, this cause contributing as many failures as lack of ability. How much that capital should be is a credit deduction to be determined from the facts. It must be enough. Business can run on credit for a time, and in a limited way, but there must be the backbone of invested capital to support the credit structure, or it will collapse under strain. Capital is like the underpinning of a building—it gives support to the structure while the work is being carried on.

Credit makes a beautiful structure: but it needs the stability of capital to insure lasting qualities. And every business must of necessity have its adequate capital investment or it fails.

"THE THREE C's OF CREDIT"

For the present purposes we will assume that the three C's of credit—Character, Capacity and Capital—are in evidence in each of the problems under review. In just what proportion is not essential for the time being, it being enough that they exist in a measure sufficient to pass the test.

How this is ascertained depends upon the loan, whether local or foreign. If the applicant is a depositor, we will have his average card to judge the quality of his bank account; he may be known personally: we may get a report on him; we may inquire among the business houses where he trades. If the borrower is not known, as most of the borrowers in the open market are not, we ascertain the moral standing by communicating with the banks and trade connections given as references. But being satisfied on the essential points suggested above, the proposition gets down to an analysis of the statement, in order to ascertain the probability of the loan being paid from the property worth, irrespective of its moral setting; for ultimately the loan must be paid from the earnings and assets of the business. If there be honesty and ability but no resources, the former qualities, however much in evidence, will make a poor paymaster. From the business as a business, buying and selling, trading and taking trading profits, the loan must be paid, and it is now to inquire if, in the probabilities of business, the applicant will, in the course of time, be able to make good on his promise. This is the purpose of the statement.

We shall, therefore, take four representative statements—actual statements, in different lines of business: (a) Meats, because of the liquidity of the assets and their quick convertibility; (b) groceries, because of their wide demand, and likewise quick convertibility; (c) millinery, because of its seasonable character and risky qualities; (d) a manufacturer of brass beds, to illustrate points found only in manufacturing statements. By dissecting these statements we shall unconsciously apply many credit principles, and not

only endeavor to arrive at proper conclusions, but understand the logic by which they are obtained. For every deduction there is a reason, the reason being better understood by applying a principle than merely talking about it.

ESSENTIALS IN A CREDIT STATEMENT

Forming as it does the foundation of the credit man's deductions, two things are essential in a statement: (a) That the statement be an authentic summary of the borrower's financial condition. It should be accompanied by a profit and loss statement to show the progress of the business as the statement shows its position. This statement should preferably be made by an independent auditor whose sole purpose is reliability and conservatism: for if made by the borrower or under his direction it is not only apt to be biased in his favor, but overstate the assets and understate the liabilities, human nature being prone to make allowances for itself. If it is certified by a recognized firm of public accountants, so much the better: if not, all that the credit man may know concerning the integrity of the would-be borrower will be opportune.

It has been well said that it is not the crooked borrower who is most to be feared but the deceived borrower—the one who is himself misinformed as to his condition, and who passes the deception on to his bank. A crooked borrower may be a good window dresser, but a deceived borrower is a false window dresser. He mistakes wax figures for human beings, and papier mache for oak. He does not know the real from the false. (b) The statement must be of recent date—six months should be the limit, for much can happen in a few months, and semi-yearly statements are none too frequent. In the analysis of a credit statement the first things to be noticed are:

(1) The line—whether staple or seasonal; a novelty or a necessity. Obviously the broader the market, the more steady the demand; and the nearer it approaches the absolute necessities of life the better. We can get along with last year's bonnet, but we cannot live on last year's bread.

If the application is from an out-of-town borrower—commercial paper, it should not be in the same line as the loans that predominate in the home trade. Thus, a bank loaning largely on lumber should not buy lumber paper;

and the one that loans on cotton should not buy cotton paper. Scatter the eggs rather than scramble them. A bank like an individual thrives best under a varied diet.

(2) The ratio of quick assets to quick liabilities—it is apparent that maturing debts can be met only by maturing credits. The assets must turn into money to meet the maturing obligations, and unless there is a sufficiency of assets, they may shrink before realization to the danger point. Book accounts are never worth their face. The shrinkage depends upon the character of the business, the care used in the credit department, the efficiency of the collecting system and the state of trade: but there must be a margin for safety.

Credit men differ as to the proper proportion of quick assets to quick liabilities, but the ratio should run from one and one-half to three to one, depending upon the nature of the business. A quick asset like meat will require less margin than a slow asset like a stock of rare drugs. This ratio is quickly determined, the standard statement giving the quick assets and quick liabilities segregated, so that comparison is quickly made. This being satisfactory, we are prepared to make other deductions looking to the desirability or undesirability of the extension of credit. We will take, first, the statement of a wholesale meat concern.

STATEMENT No. 1.

The Packing Company.
November 1, 1914.

ASSETS.

Cash	\$164,000	
Accounts receivable	242,000	
Merchandise	423,000	
		\$829,000
Plant		373,000
		\$1,202,000

LIABILITIES.

Bills payable	\$391,000	
Accounts payable	41,000	432,000
Net worth		\$770,000
Capital	\$5,000,000	
Surplus	271,000	
Sales	7,500,000	

Ratio of quick assets to quick liabilities: about 2 to 1.

COMMENT ON STATEMENT NO. 1

First, we note the class of business—meats. These obviously are in constant demand, have no seasons, can be turned into money in a few days at the longest, and are steady in price and the value certain. Meat, like wheat, is as good as gold.

Next the date—recent. Good. But it is uncertified. The firm, however, bears a good reputation among the trade, are well regarded by their own banks, and the reports are all favorable. (Information obtained from the credit files, through correspondence with the banks where they keep account and among the wholesale meat trade.)

Ratio of quick assets to quick liabilities, about two to one. It is considered in the meat trade that one and a half to one is sufficient for reasons above noted; and this firm qualifies with a margin considerably over the standard set by credit men.

Cash, \$164,000. We find that by dividing the annual sales by 300 (the number of working days in a year) that they sell about \$25,000 a day. Inasmuch as they sell for cash, they should buy for cash and must have an ample balance. The cash on hand amounts to six days' purchases and owing to the short term of credit this is sufficient. Therefore, the cash balance while seemingly large is not too large for a cash business. The firm has no bills receivable. Accounts receivable are, next to bills receivable, the quick assets of a firm. They represent merchandise gone out of stock. They are merchandise turning into cash. The volume of accounts receivable indicates the credit operations of the firm. If the terms of credit are thirty days, they should not, at the most, have more than one-sixth of the total sales on their books, and this would be extending the period of credit unduly.

In this case we assume that the credit terms are not over ten days; cash at the end of the week, most likely, and there is, therefore, about ten days' sales on their books, a normal amount.

Merchandise in this case represents meats and other food products that are essentially as good as cash. This does not always obtain in merchandise accounts as will be noted subsequently; but in this instance we pass the merchandise item

with but a single deduction, i. e., that they have about two weeks' supply on hand. The plant, while it may be valuable for its terminal or water-front location, is worth the ground value only, the buildings being little suited for anything else. We discard it entirely.

Bills payable, \$391,000; accounts payable, \$41,000, or less than two days' sales. The firm evidently borrows in the open market on its single-name paper and with the proceeds buys cattle for cash, and the statement so indicates. They have borrowed about one-half their net worth, and from every standpoint this statement presents a healthy condition.

They do not and should not have many accounts payable on their books. They borrow to pay cash and this firm no doubt does, the \$41,000 representing accounts in process of audit.

Capital, \$5,000,000. Whatever this is, in the present case it means nothing, for the net worth is \$770,000 and they do not show assets to balance the statement if capital be included. You may loan them or buy their paper with assurance that it is good.

The surplus in any corporate statement simply represents the difference between assets and liabilities at the values stated. It is not a cash surplus unless the assets realize their listed value, being merely an adjustment to make the statement balance; and the surplus might be eliminated through a shrinkage in merchandise valuation. Reverse, it might be created by an overvaluation of merchandise. But in a packer's statement it would be nearly a cash surplus, although in this case it might be represented in part by the overvaluation of plant.

STATEMENT No. 2.

Brown & Jones, Wholesale Grocers.
October 1, 1914.

ASSETS.

Cash	\$410,000	
Accounts receivable	1,021,000	
Merchandise	1,301,000	
		\$2,732,000
Real estate	\$297,000	
Machinery and fixtures	62,000	
Good will	2,000,000	
		2,359,000
		\$5,091,000

LIABILITIES.

Bills payable	\$930,000	
Accounts payable	61,000	
Dividends payable	45,000	
		1,036,000
Capital	\$3,500,000	
Surplus	555,000	
		4,055,000
Net worth (eliminating good will)	\$2,055,000	\$5,091,000
Ratio of quick assets, 2.6		
Sales, \$10,360,000.		
Profits, \$252,000.		
Dividends, \$190,000.		
Certified to by the Accountancy Co., as per their audit, October 10, 1914.		

COMMENT ON STATEMENT NO. 2

First, the class of trade—food stuffs, in constant demand, profits small but sure, terms reasonably short, and the merchandise quickly turnable into money. Not so quickly, however, as meat, but within a short period. Therefore, the goods are essentially money, if well selected and staple, rare articles being handled only on order.

We note that the statement is certified; therefore, it is from an independent source. The auditing firm is well known for its knowledge of the grocery business, and gives particular attention to inventory. We, therefore, accept it with confidence.

The ratio of assets to quick liabilities is 2.6—a goodly ratio in this business and, therefore, we start off well. Two to one would be ample. Cash, \$410,000, enough to pay nearly half the bills payable, or six times the accounts payable.

We find the sales to be \$10,360,000, or about \$850,000 a month. The accounts receivable are equal to about five weeks' sales and this shows that they are close in their credits and collect promptly. The terms in the grocery trade are not over thirty days, cash in most instances and a week's credit in others. The merchandise is equal to about six weeks' sales and this is another good omen. They are turning over the stock frequently.

Against total quick assets of \$2,732,000 they owe only

\$1,036,000. Their liabilities are in the main for money borrowed on their notes—probably single-name paper sold through brokers. Their accounts payable amount to but \$61,000. This is as it should be. They borrow—or ought to—in order to take trade discounts. The statement indicates that to be the case. It could be certified by communicating with the trade. They should not have accounts payable in large volume on their books. These are doubtless in process of payment, and may be eliminated from the debts. The dividend is probably accrued to the time of the statement and is properly listed as a liability, although not necessarily quick.

The capital and surplus represent the net worth—over four million (two million, eliminating the good will), and their debts are but one-quarter of the net worth.

As to slow assets and supporting the quick, we have real estate of \$297,000. This is probably in the wholesale district, well located for business purposes and if properly scaled or conservatively appraised, is allowable at that figure.

Machinery and fixtures, \$62,000, may well be eliminated; for such is special machinery, and would be scrapped in case of liquidation. But it is not a large item, and may be disregarded.

Good will, \$2,000,000. Good will has been defined as “the tendency of trade to follow established lines.” It may be that this firm has valuable trade-marks, brands of canned goods, coffees; or has taken over such from other concerns, issuing stock therefor, and it depends altogether upon what this good will account represents whether it is inflated or not. The good will of Ivory soap, Uneeda biscuit, and other widely advertised articles is enormous and may well be capitalized. This good will may be in the same class.

The firm has earned about seven per cent. on the capital; paid dividends of about five and one-half per cent. and added \$62,000 to its surplus during the year.

But aside from all other considerations, we have over three millions of good assets and debts of only a million, and, therefore, this firm has borne the acid test and is good. Buy their paper without hesitation.

STATEMENT No. 3.

Doe & Co., Wholesale Milliners.

July 1, 1914.

ASSETS.

Cash	\$56,000	
Bills receivable	15,000	
Accounts receivable	209,000	
Merchandise	204,000	
		\$484,000
Machinery	3,000	
Advances	40,000	
Other assets	90,000	
		133,000
		\$617,000

LIABILITIES.

Bills payable	\$75,000	
Accounts payable	9,100	
Deposit of money	1,000	
Commissions	17,000	
Loan	50,000	
		152,100
Net worth		\$464,900
Ratio of quick assets to quick liabilities, 3.18.		
Sales, \$2,489,000.		

COMMENT ON STATEMENT No. 3

I have next selected a millinery statement because of its highly fashionable atmosphere, its seasonal buying, and the deductions that it invites. Here we find a ratio of 3.18—a goodly proportion—and well we might. I do not know the exact terms in millinery, but such goods are bought for two seasons, the spring and fall. The popularity of a certain style may suddenly change, if some Parisian model appears at the races with a new creation that will set all the world of fashion agog, and place millinery houses on the anxious seat, wondering if their advance orders will be cancelled and a season's work in a large measure discounted.

Such goods are sold to large and small dealers all over the country, and the terms of credit cannot be rigid, depending upon the weather in a large measure.

While the profits in retail millinery are large, they must necessarily be so, for the busy season must pay for the dull. How risky is a stock of millinery may easily be understood. If the fashions change, or the women do not take to the styles of the house, or the buying has been without good taste, the stock may be unsalable at any price.

We note that the statement is as of July 1st, when the buying season is over, and the statement should, therefore, show merchandise reduced, accounts receivable large, but maturing rapidly, the cash running up and the debts running down. We should have a statement at the height of the season and one at the ebb, to determine the true condition at the present time. At the beginning of the season the stock will be large, cash reduced, accounts receivable cleaning up, bills and accounts payable large, or just the reverse of the condition at the end of the season.

Here we find that there is no comparative statement, and so we do the best we can with the one in hand.

Sales were about \$2,500,000. This cannot be spread over months, for they are as aforesaid, seasonal. Allowing four months of slack seasons, we have eight months of activity, and the sales would then average \$300,000 a month. The merchandise is less than a month's sales, and has probably been cleaned up pretty well and the profits taken. The accounts receivable are not large in comparison with sales, about one-twelfth. Bills receivable are not large and should not be, such goods being sold on book account and not on notes of hand. If larger these might be investigated to ascertain if they are for old accounts. They might be for borrowed money. Inasmuch as the merchandise is last season's stock, we eliminate it largely and cut it down at least one-half.

No careful credit man will loan on a statement showing assets largely in merchandise. It is not goods on the shelves that pays debts, but goods sold to good customers represented by book accounts; and while the stock should be ample, it should not predominate, with little cash or accounts receivable. How quickly merchandise can be turned into money depends entirely upon the goods. Groceries can be turned into cash in a very short period; a stock of trimmings for my lady's dress in a time that is doubtful. Salable goods—that is the crucial point. It is said that the United Cigar Stores keep only a few boxes of each brand of cigars at each store. But they keep ordering as fast as the stock goes down, and the sales sheet of one day is the order sheet for the next. They know how to turn stock. This is a business asset.

Reducing the stock by half, we then have net quick assets of \$384,000, and allow \$50,000 for shrinkage in collec-

tions. Against this we have bills and accounts payable of \$84,000, commissions of \$17,000 probably due salesmen and, therefore, quick liabilities, and a loan of \$50,000. This should also be investigated to see to whom it is due, and when. There is also the deposit of \$1,000 from employees, probably, and if larger this would be an element to consider, but even so, for debts of \$152,000 we have twice that amount in liquid assets and this makes a good statement. But the character of the goods makes care necessary, and the point to be emphasized is the season. This stock may be wholly unsalable next season, and if so, it is a dead loss. A ratio of three to one is not, therefore, unduly large for safety's sake.

STATEMENT No. 4.

The Brass Bed Company.

February 1, 1914.

ASSETS.

Cash	\$411,000	
Bills receivable	271,000	
Accounts receivable	712,000	
Merchandise	1,547,000	
		\$2,941,000
Real estate	\$1,254,000	
Machinery and fixtures	1,072,000	
Investments	134,000	
Patents	1,376,000	
Other assets	88,000	3,924,000
		\$6,865,000

LIABILITIES.

Bills payable	\$1,187,000	
Accounts payable	36,000	
		\$1,223,000
Capital	\$4,000,000	
Reserve	252,000	
Surplus and profits	1,390,000	5,642,000
		\$6,865,000

Ratio quick assets to quick liabilities, 2.4.

Net worth, \$4,266,000.

Sales, \$6,150,000.

Profits, \$550,000.

Dividends, \$306,000.

COMMENT ON STATEMENT No. 4

We note first that the firm has taken considerable in notes from its customers. If it issues paper on the market, these should be in its possession, for two kinds of paper (single-

name and receivables) should not be on the market at the same time. It evidently sells both on book account and note; but the bills receivable should be investigated to ascertain if they are good, if given for old accounts or renewed. A statement might be asked for giving the maturity of these, classified into thirty, sixty and ninety days, and whether for old or new invoices.

While bills receivable are notes received by the firm in payment of bills, it depends altogether upon the nature of the business whether they should be in evidence. In a department store selling for cash or on charge account, we should find but few, if any, of these items, for if so they have been taken for accounts hopeless of collection by the regular methods. If the concern were a lumber company, an agricultural machinery company, which sell largely on these instruments, we may expect to find them in large volume and properly so; but not in a cash or semi-cash concern.

For instance, in raw silk the terms are six months' note, and we may expect to find receivables in quantities, and it becomes needful for the credit man, as aforesaid, to know the terms of business in order to pass upon these items intelligently.

Receivables should never be for loaned money; for why should a firm lend and borrow at the same time? They may be given by the partners, or interested parties, and if so they are doubtful; at any rate, they are not a good asset.

The accounts receivable are about one-ninth of the sales, and the two items—bills receivable and accounts receivable—represent about two months' sales, showing that these items are not unduly large, the terms in furniture being upwards of two months.

Merchandise, \$1,547,000. This will also admit of test. Is it raw material, or manufactured articles, or both? When was it inventoried? By whom? This is a large item, and amounts to one-quarter of a year's sales. It is probably brass or iron tubing, metals of other kinds, and, therefore, has a value as raw material in itself. But merchandise being so uncertain in its valuation, such a large item would bear investigation before placing much faith in it.

We then have real estate—the plant, of one and a quarter millions. This doubtless is valuable for its location, but should have been appraised by an independent appraiser and

properly scaled down to at least its market value, irrespective of its value as a factory for a particular purpose. Credit men do not lay much stress upon real estate, and especially factories.

Machinery and fixtures, \$1,072,000—another large item. This is special machinery and has little value except for its particular purpose. We, therefore, discard it entirely from our calculations. Patents, \$1,376,000. These may be very valuable and may be properly capitalized. How long have they to run? Is there any litigation concerning them that may cost the firm heavily if adverse decisions are rendered?

Investments and other assets, \$232,000. These should be scheduled before accepting, to ascertain what they are, for they may be of doubtful value in the statement. Bonds of allied concerns and the like are questionable at times, but often valuable for the business they control.

We note on the liability side that the firm has borrowed \$1,187,000 presumably on its paper in the market. The accounts receivable are not large, \$36,000, and it quite likely takes advantage of the cash discounts. It has cleaned up its bills as rapidly as could be expected. But eliminating all slow assets, we have quick assets of \$2,941,000 to meet quick liabilities of \$1,223,000, and it is in a healthy condition, able to stand considerable strain, with ample cash on hand, and allowing all assets at their listed amount, a net worth of over five millions, or five to one of liabilities.

Of course in the credit files there will be letters from banks which have accounts with these firms, letters from the trade connections, stating whether they take their discounts steadily or not, their general habits of pay, and the moral standing of the members of the various firms, their living habits and general reputation in the community.

The above is only a partial review of the credit man's mental processes as he glances over a statement; but I have in a small measure endeavored to indicate his train of thought as he passes judgment on a request for a loan.

CHAPTER XIV.

THE BANK MAN IN THE MAKING

If the average bank man were asked why he chose banking as a career, he would doubtless confess that he didn't choose it, but just drifted in. This desire to work in a bank, so frequently found in young men, is easily accounted for, for there is an attraction in banking which seems to appeal to young men, and the impression is quite rampant, erroneous though it may be, that the hours are short, the pay good, and the work easy.

He may have done as one young man did, look into the fine banking room and becoming impressed with the grandeur of the marble and the bronze, decided that it was "good enough for him," and got a job therein. Or, he may have seen the sign on the doors: "Open from 10 to 3—Saturdays until 12," and become impressed with the shortness of the hours, as another did, and chose his calling accordingly.

THE BANKER IN FICTION

The banker is pictured in fiction as a tall, slim, dignified, gracious individual, with gray hair and a beard, given to patting children on the head, and doling out pennies or dispensing advice in matters personal, religious or political with equal ease—a leading citizen, if you please, with a halo about his head and a fat wallet in his pocket. And, making up his mind that he, too, would like to raise a beard, wear a halo, dispense pennies and free advice, and carry a fat wallet, many a youth has, undoubtedly, sought this profession as affording all these luxuries; but whether his dream comes true or not depends largely upon the man.

THE BANK MAN'S WAGE

No doubt banking offers exceptional opportunities for making money. The banker's name stands for something; his support lends weight to an enterprise. Therefore, he is let in on a great many projects and by virtue of his finan-

cial training becomes a good judge of investments and is able to distinguish between good risks and bad. He sometimes fails to distinguish between the two, speculates with his own and the bank's funds and the old story follows. But the man who enters banking "for the money that's in it" will either fail to realize his ambition or miss the chief charm of the profession: for success here cannot be measured by the dollar standard.

Banking is a dignified calling and worthy of any man. It is a field of exceeding usefulness; and the banker imbued with high motives and a kindly heart can do much good in a quiet, unostentatious way.

Banking is not a bed of roses, and the banking world is full of disappointed and dissatisfied men. There are, perhaps, more disgruntled men than contented. The officers seem to have such an easy time. They receive callers; write letters; attend meetings; examine statements; draw fat salaries; attend conventions; play golf. And all would, therefore, be officers. But many a grumbling clerk forgets that some men are paid, not for doing things, but for knowing how. Even the gentle art of saying, "How do you do?" is an asset to their bank, and likewise the gentler art of saying "no"; and not all men are artists at shaking hands and saying "no."

The average messenger in a large bank receives, as a beginner, about \$25 per month. From this he will be advanced as he progresses until he receives about \$1,000 a year (or less) to run a ledger. Tellers in New York receive from \$1,800 to \$4,000, depending upon the bank, the length of service, the size and spirit of the institution. Twenty-five hundred would, perhaps, be a fair average. In country towns ten to twelve hundred dollars is a good salary for tellers and bookkeepers, and from two to three thousand is considered good pay for officials. The president frequently gets nothing but honor; but in large places he is the highest paid official, and will receive from five to twenty-five thousand, a few in very large banks passing this figure, but the number is small.

TWO SCHOOLS OF BANKING

Bankers may be divided into two schools, those who believe experience is the great (and only) teacher, and those

who believe in a combination of experience and book learning. The former must go through an experience before they can profit by it: must have law suits in order to learn the law, and losses in order to learn how to invest. They will point with pride to the fact that they never had a loss and turn around and make a wrongful payment that a little book knowledge would have prevented. They will rule on legal questions according to a decision discarded by the courts years ago. They will cite law that is not law because it is bad, and law is never bad—although legislation may be. They must burn their fingers to prove that fire is hot. They do things a certain (foolish) way for no better reason than that they have always done them that way, and become old in the service before they learn that book's are men's experiences, and through the experience of others we can avoid the pitfalls ourselves.

The other school says: "Give us books. Tell us what other men have done and gotten into trouble, that we may be on guard against the same things. History repeats itself. What happened in one bank may happen in another; therefore, show us the law—not that we would be lawyers—but just good bankers, and, therefore, keep out of court. Teach us economics that we may understand the trend of events and discern the signs of the times; grammar that we may write good letters; credits that we may make safe loans; the theory of money that we may understand currency problems, and history, that we may judge the present in the light of the past."

And you do well if you decide to take up this calling, to join the latter school, for these are the men whose future is before and not behind them—the optimists who know how to say "good morning!"

Of necessity the beginner will, as a rule, have to start at the bottom. Let experience go hand in hand with study. You will better understand what you read about if you are doing the very things, than if you attempt to get the theory without the practice. And if you get into a good bank, work hard, keep your eyes and ears open; spend your spare time along definite, constructive lines; it may be that you will get to the top, for the top is never crowded.

If the question were, therefore, put: Shall I go into banking? The answer would be: That depends upon you

and the bank; first, you and then the bank. If you have not the banking instinct and temperament—a liking for the things the banker must know and do, then the best training school in the land cannot make you a banker, but simply a bank clerk; and if the bank has not the environment and the opportunities that make a banker, a good man will not linger long after he discovers it.

COUNTRY BANK OR CITY BANK?

The question arises whether a country bank is a better training school than a city bank. It depends. If the country bank is a well-managed bank, broad in its views, liberal in its outlook, progressive in its management, not hidebound by tradition and a slave to the laws of the Medes and Persians, and the clerk is allowed the freedom of the place and permitted to learn the workings of the whole bank, he, no doubt, will acquire a better knowledge of banking, as a whole, than if he were to go into a highly departmentized bank and work from one department to another, acquiring only part information at a time. On the other hand, he will get a broader outlook in the city bank, and cosmopolitan advantages that smaller places do not afford. Let him, above all things, unite with the American Institute of Banking and take its study courses, a very excellent training in the theory and practice of banking.

Whether he becomes merely a machine or not, and whether he succeeds or not, depends as much upon the man as upon the bank; but if success comes it will be a combination of both; and if he fails it may be the fault of both. And failure is a relative term. Some failures are successes, after all. I would rather be a Philip in the First National Bank of Boston than certain dead men who once were bank presidents.

PROPER TRAINING ESSENTIAL TO SUCCESS

The ultimate success that the bank clerk attains will, in a very large measure, be governed by the training school in which he works. If he makes a failure, it may be because he did not have the discipline and the coaching that he should have had in early days. If a young man in the bank is doing things he should not do, in or out of the bank, the proper

course is not to discharge him, but to take him in hand and show him the error of his way, and correct him. If he will not learn, then severer measures may be necessary. As a boy he will not see things in the light of the man, but the man can see things in the light of the boy; and every banker owes it to himself, as a trainer of men, and as a man who should be interested in boys, to give them proper encouragement.

If he is frittering his time away after bank hours, a course of study may be suggested. If he shows an aptitude for any one branch of banking, give him a chance. A boy with an overwhelming ambition to know and to do needs right direction, or he will be likely to scatter his energies. The banker owes it to himself and to his men to find out the things that interest them; to encourage them in the right, and advise them if in the wrong. If a man shows an inclination to study, see that he studies the right things—the things the banker should know. Make it easy for him to get information. Subscribe to the financial papers. Put them where the bank men can get them. Do as one bank in New York does, subscribe for the best magazines in sufficient quantities so that all may read who care to, and be sure to read them yourself.

PIVOTAL POINTS IN THE BANK MAN'S LIFE

But whatever the motive that induced our man to become a bank clerk, his banking career will, if he is successful, divide itself into three periods or epochs: the period of observation; the period of application, and the period of administration. Just where one begins and the other ends is not easy to say. He can make these periods long or short as he will; and whether or not his career shall end in the period of close application where every to-day is a yesterday and every to-morrow will be another to-day, is for him to determine.

Little things often turn the current of life's events for better or for worse, and no man can tell when an event, insignificant in itself, may make or mar his future. Therefore, let us not despise the little things, for, as Michael Angelo observed, "trifles make perfection, and perfection is no trifle." And so, let every day be the great day, and every chance the great chance, for if the task be worthy, it de-

serves our very best, and good work well done, like the chickens, surely comes home to roost.

LEARNING BY DOING

The period of observation begins as he enters the bank as a runner. Here he will learn to do by doing. If he is a good messenger, he will have no other ambition than to do his daily work well, and whatever banking knowledge he acquires, will not be from books, but from practice. He will not even know the reason why he does some things—it is not essential that he should; he will do as he is told, simply because obedience is the order of the day. But as he works his way up through one department after another, he will acquire the practical end of banking, as a sponge absorbs water, without effort, and in due course will come into the period of close application where the mill grinds swiftly and often exceedingly fine.

As bookkeeper, teller, loan clerk, or what not—occupations requiring concentrated attention—his time will be fully occupied with detail work, monotonous in its grind, and often severe in its demands upon his strength, and it is in this period that he often longs for the more enjoyable experiences of banking on the “sunny side of the street.” And if in the period of observation he is keen and alert, and in the period of close application faithful and accurate, the time will come when there will open to him the period of administration—the goal of every ambitious bank man.

EVERY MAN CAN BETTER HIMSELF

We err greatly in holding out to Young America the hope that any boy can be President of the United States; for as a matter of history, less than thirty have ever achieved this honor, and less than thirty will during the present century; for while it is not an impossible goal, it is an improbable achievement. But when we make the statement that every bank man can better his condition, improve his mental caliber, and increase his income, we state a fact which is borne out by current events in banking history every day. And when the banking world says to the men in the ranks, “You can climb, if you will; you need not stay in the period

of observation very long, nor work in the grinding school of concentration always, but you can, if you will, lift yourself round by round into the happier experiences that attend the period of administration," it offers a proposition upon which it can make good.

A DEFINITE AIM

To accomplish this desirable result, several factors must be taken into consideration. First of all, the man must have a definite aim, and worthy; for if it is not definite, his energies will be scattered, and if it is not worthy, he cannot or ought not give it his best endeavor. Better to aim at the moon and hit a church steeple than to aim at a barn door and hit nothing. The human mind is ever open to distractions and is apt to follow the line of least resistance, and because it is so difficult to resist the tendency to mental wandering, a capacity for definite, constructive work is one of the greatest conquests a man can make over himself.

Much of our reading is merely mental dissipation and what we need is to be able to concentrate our attention on one subject until it leaves a lasting impression upon the mind. It is better to know a few things well, very well, than to know a great many things casually, and, certainly, far better than to know a great many things that are not so.

The unthinking man is not necessarily a dull man; he has probably occupied himself with unimportant things; and until he gets a definite aim in life—a master passion as it were—he will never rise to his highest level of achievement, and if that passion is to know, he will either find a way or make one.

TAKING HIMSELF FOR GRANTED

The great temptation of the average man is to take himself for granted; to get the idea that because he can do to-day's work as well as can be expected of him, at least so well that no criticism is hurled at him, and, therefore, he has done all that the occasion requires. Particularly is this true if he has had a small measure of success without unduly exerting himself. In this he greatly errs, for if he is a sensible fellow he will not be satisfied by the mere fact that he holds down a job—he should hold it up—giving it dignity and distinc-

tion by the excellency of his work. And more than this, he ought to have his eye on the job ahead. Many a man owes his success to the fact that in an emergency he could step in and do the work of the man ahead, and many a man owes his defeat to the fact that when the opportunity was his, he could not rise to meet it. A great opportunity makes a man ridiculous unless he is prepared for it. The man whose horizon is bounded by the four walls of his cage, and who cannot see in the job ahead his opportunity will live to regret it. And if he cannot get in the departments higher up, let him get those departments in him.

This taking one's self for granted is deceitful in the extreme, and such a one is apt to discover too late that he doesn't know what he thinks he knows; and many of the things he thinks he knows really aren't so. But he who would succeed in this war of brains must be willing to put himself to the test, taking nothing for granted, and demonstrate that he not only knows, but that he knows he knows what he knows, and what he knows is so.

Many an energetic bank man, ambitious to rise in the world, grants you that "knowledge is power," and if success could be bought, would pay a goodly sum for it; but inasmuch as knowledge is not a commodity measured by the dollar standard, the toll is often too great. Who has not seen the man who would not in a single hour like to learn some of the deep things of life, and willingly would he give the hour and the teacher's fee; but no educator can in an hour, a week, or a year, impart the information it has taken him a lifetime to acquire. And until our bank man is willing to pay the price in years he cannot hope for lasting results.

DEFINITE METHODS

But the man with a definite aim must have a definite way of going at it, else the definiteness of the aim will be futile on account of the scattered energies. It is simply the case of the shotgun against the rifle; one scatters many shot—the other sends one bullet home. Many an ambitious bank man is willing to work for success, but needs direction as to how to make his willingness effective. Ambition often needs proper direction or the ambition is apt to turn into despair, and the purpose of banking education is to direct the man

with a definite aim into the definite methods by which he can achieve a definite goal.

WHAT IS EDUCATION?

Education has been defined as a process by means of which experiences are acquired that will assist in rendering more efficient future actions; a course in discipline; a systematic development and cultivation of the mind and other powers by examples, experiences and impressions; or, as the German has it, *erziehen*, "to draw out." But whatever the definition, education must help a man think; to be orderly and logical in his thought processes; accurate in his observation of men and things; discriminating in his judgments and charitable in his conclusions.

This process may be formal or informal. Informal education is the education that the bank man obtains throughout his business career without conscious effort to this end; experience, if you please. Such knowledge is absorbed without much thought or definite intent. In such a process a man is like a child, in that he gives matters passive attention and the activity is characterized by an interest in the process rather than in the finished product. He is absorbed in what he is doing for the time being and the end to be gained does not unduly concern him.

EXPERIENCE A DEAR TEACHER

No one will deny that experience is a good teacher. The lessons she teaches are long remembered; but the trouble is, she is a slow and expensive teacher and in such a school, one learns only those things with which he has come into contact, and profits not by the experiences of others. A burnt child dreads the fire much more than one who has simply read of fires in books; but the trouble is the scar. And he who learns only in the school of bitter experience must expect to become scarred while learning.

The great trouble with this form of education is that it is unsystematic. It fixes the experiences that happen to come, but makes no provision for the experiences that may come and are unfamiliar. And more, it is a time consumer and wasteful. Take a simple illustration. You burn your

finger. Some one who has burned theirs and found sweet oil effective, promptly prescribes sweet oil; but this burn may not be a "sweet oil burn" and you call the doctor. He has not only had experience with burns of your kind, but with others as well; moreover, he has studied burns in books. He draws not only upon his own experiences, but upon the experiences of others and immediately knows what treatment your burn needs.

This is as true in banking as in medicine. The banker who relies upon his own experiences is helpless when his experience has not covered that particular thing. He has not learned to reason; he cannot draw upon similar experiences of other men; he has not trained himself to put facts together and draw conclusions; to apply a rule to a set of facts and derive a correct solution. We would not belittle experience—it is most valuable; but experience should be supplemented by study, and study by experience to make the all round bank man.

EDUCATION A DEFINITE PROCESS

Formal education is a graduated, definite process. It begins where it finds the man, gently leads him step by step into the higher realms of knowledge, adapts the process to the man and remembers his shortcomings. The great trouble with so many energetic bank men is, that not knowing where to begin they plunge blindly in, reading anything that bears on finance and banking; and this reading being non-constructive in its nature, accomplishes but little. It is highly essential that the student be well grounded in the fundamentals before proceeding with the superstructure. This is the curse of ill-advised home study—it is unsystematic. The man starts wrong and ends wrong. And the great aim and purpose of education is to direct the man into those channels that will produce the best results at the least cost of time and effort. It leads him from the simple to the complex; from the concrete to the abstract; supplementing theory with practice; the law with the application thereof.

MORE BREAD AND BUTTER

Behind every scheme of education, whether it be a college course or a system of home training, there are two control-

ling motives, both of which are worthy; first, the bread-and-butter motive, and, second, knowledge-for-its-own-sake motive. It is just as much a function of the school to teach men how to earn a living as it is to teach them how to live; and just as essential to teach them how to live as it is to fit them to earn a living; and the greater the knowledge, the greater the earning power, provided the knowledge be of the right sort.

We live in the age of efficiency. The machinery of today is in the scrap-heap to-morrow. The old is supplanted by the new. Every machine must do its best, no lost motion—no idle time. We demand in every line of activity that the man be capable. We pay good money for ability, and get it, whatever the cost. He who can do things is well paid; he is well paid because he can do things. We do not always award the race to the swift, nor the battle to the strong; for behind the swiftness there must be sureness, and behind the strength, accuracy. Of what avail is a hard blow if it does not hit the mark? He who runs swiftly must be sure of his footing. He is the winner in the battle for bread who can do things and do them well.

Carlyle reminds us that the German word "*koenig*" (king) comes from the verb "*konnen*" (to be able); therefore, a king is one who is able—a man who can; and because banking continually demands kings—men who can—he who has his eye on the future must not ignore this call for efficiency, and is fully justified in his argument, that as he knows more he will get more; and when he knows more about one particular thing than anyone else, the world will rate him a specialist and pay him specialist's wages.

The second motive for education is that we may know the truth, for the search for truth is the master passion of the human race. Not that we may merely hoard facts and figures, for such hoarding makes us misers as truly as the hoarding of money, but in storing up information there comes power in reserve.

And in this storing process there are pleasures keen as the world affords. The enjoyments of the mind are as sure as those of the body, and the great truth is, the mental are the more enduring. Who will be so bold as to deny that the man who gets his amusement in a good book has not as genuine pleasure as he who must find his amusement in dissipa-

tion? It is a law of hygiene that he who would do his best work to-morrow must not spend to-night in riotous living, and the prodigal loses at both ends. The story of the night is writ large in the work of the next day. It is admitted that to learn to appreciate knowledge for its own sake is not an easy task, but, nevertheless, it has its compensations. It does not demand its toll in strength, and in its possession there is in the present, satisfaction, and in the future, power.

Therefore, let the bank man, while striving for more (or better) bread and butter, not forget that while he should be a specialist in banking, and, therefore, narrow, he may and should be broad as well; for back of keenness there must be breadth or the keenness becomes ineffective. And when knowledge for its own sake ceases to attract its devotees the human race will be in a bad way.

THE BANK MAN'S TWENTY-FOUR HOURS

To the bank man who really wants to know there is no measure of time. The days are all too short and the nights too long for him who is in earnest about his education. Three o'clock—the "quitters' delight"—never comes to the man who wants to know. The man who endeavors to excuse his shortcomings by saying "my education was neglected" offers an excuse as full of holes as a sieve. Neglected by whom? Does he work so long and so hard that he never has a moment for self-improvement? Are his days so crowded with work that his nights must be given to resting for the next day? Does he not give enough time to the newspaper in five years to give him a college education, if he would only get started right and use well the spare moments? Could he not, if he would, find a spare hour or two every day and a few at the end of the week for definite, constructive, educational work? It is the idle man who has no time; the busy man has all the time there is! Do you not know that in two and a half million years the bodily structure of the human race has remained practically the same, and the only marked change has been in the size of the brain? How useless, therefore, to spend time in a vain endeavor to improve our looks: we are not responsible for our faces nor for the size of our hats—our head ceased growing when we were eight years old—but we are responsible for what is under the hat, and brain polish was never so cheap as now.

It is admitted that this educational work is not easy. It is hard, for the reward lies in the distant and often misty future, and only the bravest of men can work against time. Play is always easy, for its reward—pleasure—is immediate; but what bank man wants to be eternally playing just because it is easy? We need the inspiration that overcomes the dragweight of despondency which is so apt to set in and tempt us to say—"Well, what's the use?"

And what shall be this inspiration? Shall it not be the secret thought that somewhere and sometime a golden opportunity will knock at our door and we must be ready? It may knock only once, and lasting will be the regret of him who must let it pass by.

There is a secret satisfaction, impossible to describe, when the world singles you out as a "man who can," and stamps your self-denial as admirable, your zeal commendable, your enthusiasm catching, your example inspiring, your personality pleasing, your character honorable, your work worthy and well done; and as evidence that this is no vain flattery, hands you out the coin of the realm, the world's best evidence that it means what it says.

Men usually get what they go after, if they go at it in earnest; and you can get what you go after if you go after it aright. The bank man, young or old, who resolves with a quiet resolution, as unshakable as the mountains, that he will not be an apprentice forever; that he will not spend all his days bending over a ledger; that his measure of time shall be full of hard work for future success; that he will climb because others have inspired him and shown him how—is bound to win. Are you that man? And he who gets the inspiration of an ideal, and applies himself along definite lines—reads that he may know, and knowing, do, will not only have the satisfaction of knowing that his work has been well done, his time well spent, his opportunities improved, his ambitions rightly directed, but will receive the more tangible evidence that he, too, is a king—because he can.¹

¹Mr. Joseph Chapman, Jr., vice-president, Northwestern National Bank, Minneapolis, Minn., has for some years past, at each convention of the American Institute of Banking, offered a cash prize for the best paper on some phase of Institute work. The foregoing, prepared by the author, then Secretary of New York Chapter, was awarded the prize at the Rochester Convention, September, 1911, and is here presented in slightly altered and enlarged form. In its original state it was issued as a pamphlet on Education by the New York State Bankers Association for distribution in New York State only.

THINGS THE BANKER MUST KNOW

Business success is not, like war, to the strongest, but to the fairest, the just, the shrewd, the far-sighted, the prophets and those who, in the struggle for money, know the game and play it well, and who use every just advantage to their own profit.

In every contest, however simple or complex, there are two conditions for success: (1) A knowledge of the rules, and (2) skill in performance. There must be recognized rules and principles to govern this contest for business success, else men would trade unfairly. Some would get more than they were entitled to, and defraud the weak and the unwary; therefore, we have business law—the evolution of the methods and customs of merchants as handed down through the centuries—the equitable basis of men's dealings with one another then and now. The banker must know this law and follow it.

Success can only come to the banker as he understands these rules and precedents; the functions of money; the nature of business; the customs of business, and the condition of business. He touches business life very intimately. His success is coincident with the success of others. Only as the merchant succeeds can the banker succeed.

Every banker can and should acquire a taste for banking law. He should, above all things, become thoroughly acquainted with the Negotiable Instruments Law, for this is the basic law in each of the forty-six States and territories where it has been enacted, and it will settle many disputes. The author has had the privilege of answering some of the questions that have come up in banking practice as viewed in the light of the law, and as a general proposition it may be stated that the banker could have answered his own query from this now widely adopted law. He should learn to read banking cases understandingly. They may look uninteresting because of their legal dress; but they can, after a little experience, easily be understood.

He must know how to profitably employ the funds in his possession; whom to trust; how to buy securities; how to collect checks; how to run a bank. And knowing the law and the practice he becomes a good banker.

The banker must know how to employ the products of

others—to use men. He cannot do it all himself; he must delegate his authority. Therefore, he must know how to get results. Banking, like business, is coöperative, and the bankers must work together. The trouble in this country has been they have worked alone, every man for himself and every bank for itself. We have needed a spirit of “get together” and all profit by the getting together.

The banker should know banking history. “I have only one guide,” said Patrick Henry, “and that is the light of experience.” The banker can understand the present better if he understands the past. Banking has been an evolution. Past dangers are guide posts to present safety. What happened once may happen again. Panics have fundamental causes. What were they? Do they now obtain?

He should know the banking practices of other countries. The Federal Reserve System is based on banking practices and experiences the world over. How do they do things in England, France and Germany, and what is the secret of their success, or the cause of their failure? How does the central bank do its work, and what are the lessons it would teach? This is banking history applied. And all history can be applied. It repeats itself.

CHAPTER XV.

THE MORNING MAIL.

The mail of a large city bank is enormous, both the incoming and the outgoing: while that of a country savings bank is insignificant. It is valuable mail which, if lost, entails a large amount of labor to replace. The wonder is so little goes astray. The mail of a large bank will amount to upwards of 3,000 letters a day, containing from 35,000 to 40,000 checks, often representing in value as much as \$30,000,000.

But whether large or small it must have prompt attention, for it may contain valuable instruments which must have immediate attention, and promptness is a virtue for its own sake.

Two-thirds of the mail arrives during the night and in some banks is handled by a force of from twelve to twenty men. A few banks have men who work in shifts all night, so that the work is fairly well in hand in the morning, the mail coming in during the night being collected from the postoffice at various times so that it does not accumulate. Some banks are opposed to night work and so handle it all in the morning. The Chase National Bank, which has very extensive connections with out-of-town banks, is of the latter class.

The incoming mail will consist of (a) letters which are in the form of deposits—remittances for credit and collection, which sometimes contain cash items, collection items, coupons, drafts and credit inquiries; and each must have proper attention; (b) acknowledgments of mail received and credits made, and returns of uncollected items; (c) special letters regarding loans, investments, credits, and other personal matters that must have attention by the executive force; and (d) circulars, magazines, bond offerings, etc. There is also mail for the employees—a practice which some banks discourage, others encourage and others just permit.

In clearing-house cities the mail becomes an important part of the day's work inasmuch as a large part of the contents must go through the morning clearings, and quick and accurate work is, therefore, necessary.

Only in large city banks will it be necessary to have a "mail teller" whose duty it is to take charge of the mail, opening it promptly, proving its contents, and despatching the outgoing letters. The work is sometimes delegated to a junior officer, chief clerk or other employee who takes charge of the force and keeps the machinery working smoothly. It is the first thing that requires attention in the morning, and the last thing at night.

The contents of the mail will classify itself into (a) Checks on local banks to go through the exchanges, and are turned over to the paying teller; (b) collections in the city, turned over to the collection or note teller; (c) checks on the bank itself, turned over to the bookkeeping department; (d) foreign items, turned over to the collection or transit department; (e) cash, to the receiving teller; (f) coupons, to the collection department; (g) credit inquiries, to the credit department; (h) other correspondence to the proper officials and employees; (i) second-class mail—too often to the waste basket.

If there is a mail teller, of course he charges himself with the total of the letters, taking credit for what he turns over to other departments, and his day ends as it begins, with nothing.

As the letters are opened and checked, the contents are assorted, clearing-house and other cash items being kept in a pile by themselves. Cash is sometimes left with the letter until the clearing items are disposed of, as are also other collections that do not require haste.

Where the clearing-house items of the day before are separately listed, the items coming in through the mail will be added and will constitute the "morning additions." In some cases where it is impossible for the work to be completed in time for the clearing, all large items are taken out and the others held over. The total charged out to the various departments must, of course, balance with the total of the cash items received in the mail. The letters are treated as deposit tickets, sorted out according to the divisional arrangements of the bank, and may first be listed as deposit tickets in a scratcher for proving purposes.

The mail department, or the mail work, is identical with that of the receiving teller's work, the only difference being in the impersonal depositors.

The routine in a large bank is described by Mr. A. K. Moore, formerly of the Chase National Bank, New York, as follows:¹

HANDLING THE MAIL IN A LARGE CITY BANK

"The first batch of letters arrives at 6.30 and every half-hour afterward up to 9.30. The envelopes are cut and the

MAIL TELLER—PROOF SHEET

For					191			
DEBITS				Folio	ACCOUNT	CREDITS		
					Debit Clerk			
					Credit Clerk			
					Loan Department			
					Collection Department			
					Coupon Department			
					Paying Teller			
					Receiving Teller			
					Trust Department			
					Reorganization Department			
					Securities Department			
					Foreign Department			
					Transfer Department			
					Total Departmental Balances			
					To-day's Clearings			
					Exchanges			
					Suspense Account			
					Exchange			
					Fifth Avenue Branch			

PROOF OF MAIL TRANSACTIONS

contents placed on the desks of all the clerks so that on the arrival of the force at 8.30, each man has his share in front of him. At least ninety per cent. of the entire force of the bank has to work on the mail. As the letters are checked, the contents are placed in four piles—clearing-house items, cash routes, such as items on bankers, trust companies, merchants, commission houses, etc., checks on ourselves, and foreign items.

¹Before New York Chapter.

"These items are collected by boys, each boy having one kind to collect. The clearing-house items go to the stampers and then to the sorters, and finally reach the machines where each bank is listed and the amount proved. The foreign checks go to the head of the department, who looks them over, keeping a careful watch for items that should not be sent to us, and at the same time taking memoranda of exchange charges. They are then sent to the collection department, where they are sorted and listed, and the total charged to the collection clerk in the daily proof.

"The checks on ourselves are sorted, listed and proved by machines, charged to the check department and placed with the exchanges received from the clearing-house, the check clerk carrying the total in his proof at night. The route items are sorted into the different routes, being listed on sheets for the use of the mail department and in route books for use of the note teller. A proof is made by a comparison from sheet to book, and the total charged to the note teller.

"As this work must be finished by ten o'clock, you can readily see that some strenuous work is necessary. Our mail averages about 1,500 letters daily except Monday, when it is double that figure. In checking off the letters any item having the appearance of a collection is left in the letters for examination by the collection clerk or the note teller, who has charge of the city and foreign collections.

"As the letters are checked, they are collected and taken to the mail department, where the collection items are signed for by the collection clerk and note teller. They are then sorted numerically (our accounts run by numbers and not alphabetically as in most banks), listed in credit books, and strung by cords according to the ledgers, then go to the bookkeepers for credit on the ledgers.

"During the day they reach the advice department, where their receipt is acknowledged. Later on they reach the check department, where the credit is made on the account current.

"In no other department of a bank is there so much chance for error. Our correspondents, having no knowledge of our way or mode of doing the inside work of the bank, the chances of error are increased. Errors caused by the country clerk when not caught by his city brother are sure to

make trouble. The difference has to be located, and the hunt for a difference is very tiresome and tedious.

"After the struggle to get to the clearing-house and to give to the different departments the work that comes with the mail (the mail department is the source from which all the inside daily work of the bank originates), to find late in the day that you have a difference, does not tend to fill one with the sense of happiness that work should bring."

Mr. Moore advocates the use of a uniform remittance letter, and cites in support of his claim the following incident:

"Some time since we received a letter by registered mail from a bank in a large Western city. It contained five items listed as cash and footed. The first item was a clearing-house check for a large amount. The second, five railroad bonds listed at par, to be sold at best market rate (which at that time was considerably above par); third, a draft on Tokio with a bill of lading attached, calling for a number of crates of bicycles; four, coupons not yet due; fifth, a sight draft on a flour firm with bill of lading attached for two hundred barrels of flour, the draft to be paid on arrival of the flour. The total of the letter was about \$35,000 and that amount was charged to our bank by the Western bank. When we had passed it to the different departments to which it belonged, it looked more like a Chinese laundry check than a bank remittance.

"As the only strictly cash item in the letter was the clearing-house check, the Western bank when it received our acknowledgment could not have easily located it, as their books showed no such amount forwarded that day. Suppose through our efforts in this direction, in a year from now the banks having a large out-of-town business should receive a quarter of their mail in this shape—all strictly cash items listed and footed; all drafts subject to payment on the arrival of goods listed on a letterhead stating plainly that the item is for collection only, with a request to report payment by a collection number; all foreign items reading, "*Tres octo Trientes dies vista*," or written in foreign languages; coupons for collection, in fact all items not payable on demand or where there is a question of immediate payment should go under this collection heading.

"If a request for a discount is made and mailed to the

discount clerk, or personal letter to an officer, if all shipments of currency for credit are on separate letters and registered or expressed, if coupons—the bane of a bank clerk's life—should come on separate letters with a statement whether they are to be taken for cash or collection; if stocks, bonds or securities for sale were listed and written on separate letters and not on the bottom of a cash remittance letter as they frequently are, if, in fact, the items could be handled by the different departments without the original letter going from one department to another, would it not lessen our work and the work of the officers, would it not lessen the number of apologies written by officers in explanation of clerical errors? I know it would. No officer in a city bank would ask a country correspondent to change its system so as to more readily conform with the work of the system in the city bank. My idea carries with it little or no change in systems—only suggests a little care that should be used in forwarding cash or collection items so that the city bank could be reasonably sure of the wishes of its country customer. It would make little or no more work and would be a great benefit at both ends of the banking line.”

OUTGOING MAIL

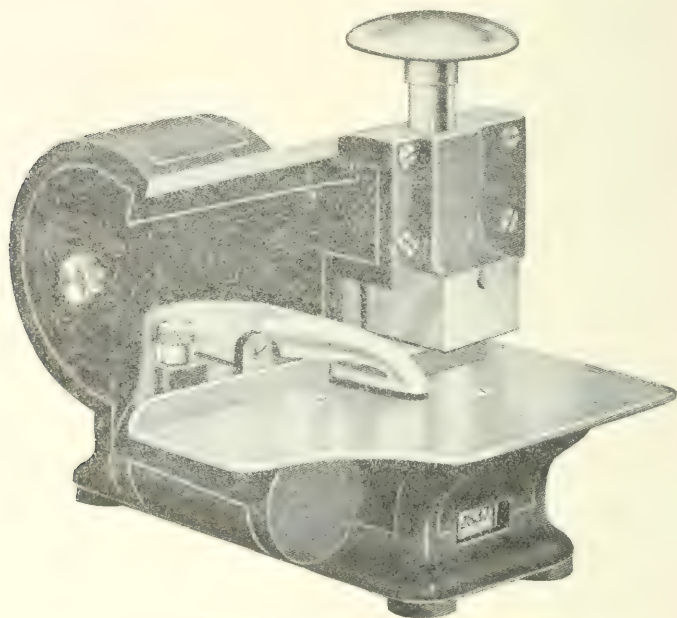
The proper handling of the outgoing mail of a bank is one of its most important features and one in which great care is necessary. How often it has occurred that a bank has made a remittance to its correspondent in a reserve city, calculating to have a certain balance to draw upon for an important matter, and has had its plans delayed, and possibly frustrated, because the letter was returned for want of postage, or had been mailed to the wrong bank.

The prompt despatching of the mail is important, and its prompt arrival equally so. Law suits sometimes hang on the arrival of the mail. In a recent case it was attempted to show that a letter containing a large check did not arrive at the time claimed. If the letter arrived on Saturday morning, there was a balance sufficient to cover it, and the bank was liable; if it did not arrive until Sunday morning, the balance was insufficient on Monday morning and the bank was not liable. But the evidence strongly pointed to the fact that the bank held the check over from Saturday, the

court presuming the mails to have arrived in due course, which the postmarks evidenced.

While no one is infallible, yet such a systematic arrangement can be made as to reduce the liability of errors to a minimum.

After the letters are written, checked and copied, they are, in large banks, turned over to the mailing department to mail. They must go to the right banks, with sufficient post-



STAMPING MACHINE—AFFIXES AND REGISTERS THE STAMPS AS USED

(Courtesy National Automatic Machine Co., Brattleboro, Vt.)

age attached. The postage cost must be ascertained in total and in detail.

In the mailing department the envelopes for the one thousand or more correspondents are addressed by the addressograph in lots of twenty-five to one hundred of each, and these are assorted and distributed in tills or files, a compartment for each bank, arranged alphabetically. In some very large banks a separate set of compartments is used for various divisions of the United States, each division constituting several States. The letters for foreign countries have separate compartments.

Before these tills or compartments is a wide shelf, at a convenient height for one to work at when sitting on a stool or chair. There are a number of mailing clerks, each attending to only a portion of the alphabet. The head mailing clerk knows how many banks each of his assistants has to attend to, and every morning issues the proper amount of two-cent stamps so that one envelope, the one on top, in each compartment receives a two-cent stamp and is ready for the final work. At the close of the day these envelopes are taken from their compartments and placed in trays on edge, retaining their alphabetical arrangement. The trays are of wood, about seven inches wide, three inches deep, and two feet long.

As fast as the letters are completed, they, with their enclosures, are given to their respective mailing clerks. These letters are placed in piles, laid flat. The mailing clerks sitting before the shelf, or a table, with the tray at their right hand and the piles of letters and enclosures at the left hand, select their envelopes from the trays according to the address on the letters and proceed to fold the enclosures in the letters, and to insert them in the envelopes, these then being placed in another tray.

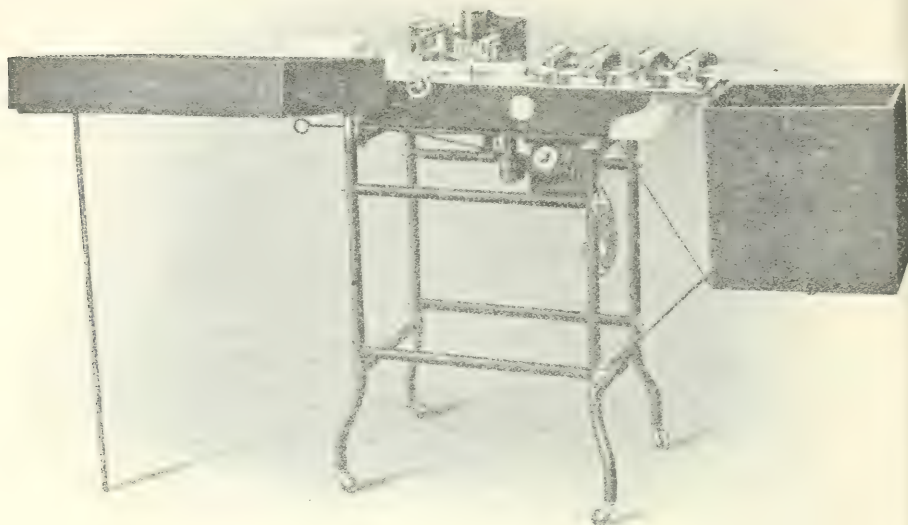
IMPROVED METHOD OF FOLDING LETTERS

An improved method has been adopted by many banks in folding the letters. The letters with their enclosures are folded ready for the envelopes by the men who write them, thus greatly reducing the danger of getting the enclosures in the wrong letters. Instead of the letters being folded as customary, the reverse method is adopted, with the writing on the outside and the address at the head of the letter showing prominently. The letter writers put a rubber band around each letter to carefully retain the enclosures, and these folded letters are placed in trays and sent to the mailing clerks. From the address on the outside the mailing clerk readily selects the proper envelopes.

As the envelopes are filled they are taken to the sealers, where they are sealed by a machine run by electricity. The letters requiring more than two cents postage are then separated from the others, weighed, and placed in bins that are labeled according to the postage required, those requiring

only two cents postage having already been placed in a bin labeled accordingly.

A great many postal cards are used as mere acknowledgments. If there are letters to the banks to which any postal cards are addressed they are enclosed in the letters. If not, they are, of course, mailed with the one-cent postage.



"THE NATIONAL" AUTOMATIC SEALING AND STAMPING MACHINE—WITH THIS MACHINE IT IS POSSIBLE TO SEAL AND STAMP, SUCCESSFULLY, 10,000 ENVELOPES AN HOUR OR TO SEAL ALONE 15,000 AN HOUR—IT WILL HANDLE ANYTHING FROM A SINGLE SHEET OF PAPER TO A 36-PAGE CATALOGUE—IT COUNTS AND REGISTERS EVERY STAMP USED, THUS ELIMINATING THE LOSS OF STAMPS THROUGH MISUSE OR CARELESSNESS

(Courtesy of National Automatic Machine Co., Brattleboro, Vt.)

The bins mentioned are built on the back part of the mailing table. They are about eighteen inches square, made about one foot high at the back and low in front (about four inches). They are generally in two rows, eight or ten in a row, one row above and a little back of the other, each bin being labeled with the proper postage denomination. One is marked for the registered mail.

It often occurs, particularly on the last day of each month, that many packages must be mailed requiring large

envelopes. These are sorted out and given to a clerk who attends to that especially.

The mail having been sealed and weighed, and distributed to the bins, stamps are now issued by the head mailing clerk for all extra postage (over the two cents). The stamping is then completed, the letters are put up in packages of fifty in each bin, and then the counting for the proof of the postage takes place. This being completed, and the statement made, the mail is ready for the postoffice.

The registered mail, containing as it does packages of value, should be recorded in a book prepared for that purpose, and when the postoffice receipt for the same is returned it should be noted in this register and the receipt filed by number.

RECORD OF STAMPS USED

The proper care and handling of the postage stamps in a large bank is an important feature. The stamps are purchased in large quantities, and are generally taken care of by an officer of the bank. When the purchases are made a charge ticket is sent to the general ledger charging postage stamp account with the amount of money so expended. Each day the head mailing clerk makes out a requisition for the stamps he will probably need, and this is given to the officer in charge of the stamps.

When the letters have all been stamped and counted a statement blank is filled out showing the number of letters and their respective value in stamps. Such a statement sheet is here shown:

<i>Daily Mail Sheet</i>														<i>Registered Value</i>	
<i>1[¢]</i>	<i>2[¢]</i>	<i>4[¢]</i>	<i>5[¢]</i>	<i>6[¢]</i>	<i>8[¢]</i>	<i>10[¢]</i>	<i>12[¢]</i>	<i>14[¢]</i>	<i>16[¢]</i>	<i>18[¢]</i>	<i>20[¢]</i>	<i>22[¢]</i>			
<i>120</i>	<i>797</i>	<i>1020</i>		<i>22</i>	<i>12</i>	<i>12</i>	<i>5</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>4</i>	<i>3</i>	<i>6</i>	<i>1.08</i>	
<i>Date Oct 10/07 Total letters 4216 Head Mailing Clerk J. Sprick</i>															

A statement is sent to the officer having charge of the stamps at the close of each day.

The amount shown by the "cash balance" of this statement must agree with the value of stamps and unused stamped envelopes on hand with the head mail clerk.

The amount as shown by this statement as "stamps used \$118.12" should be reported to the general ledger bookkeeper by charge and credit tickets to charge an account styled "Mail Acct." and to credit the "Postage Stamp Acct."

Form 5512C-1-07

DAILY POSTAGE. *Statement.*

DATE <i>Oct 10/07</i>	DENOMINATIONS							SUMMARY Showing Cash Values		
	1c	3c	4c	5c	6c	8c	10c			
Stamps on hand, . . .	180	1007	33	8	58	114	58	On hand	4206	
Stamps received, . . .	300	2000	1600	—	—	—	—	Receipts	107	
Total, ...	480	3007	1633	8	58	114	58	Total	148906	
Total stamps used . . .	420	2208	1554	2	45	25	28	Disb'd	11812	
Balance stamps on hand,	60	799	79	6	13	89	30			
Value in denominations,	\$.60	\$ 1598	\$ 316	\$.30	\$.78	\$ 7.24	\$ 3.00	Cash Balance	3094	

Time mailed.....*5:30 P.M.*
 Number of letters sent.....*4238*

*J. B. Smith**Mail Clerk*

DAILY STATEMENT OF POSTAGE

"The Postage Stamp Acct." will then show the total amount of stamps on hand, both in the officer's and the head mail clerk's hands, and the "Mail Acct." will show the actual expense. This can be done at the end of each week, or at the close of the month if preferred, by keeping these daily statements carefully filed and making a total of the amount used, with the adding machine. The total balance on hand as shown by the "Postage Stamp Acct." can be verified at any time.²

FILING BANK CORRESPONDENCE

After it is no longer the day's mail it becomes exceedingly valuable as a record, and the old adage: "Never write a letter and never destroy one" is apropos. But banks both write and destroy—after waiting a reasonable time to allow

²With acknowledgement to A. R. Barrett in The Bankers Magazine.

for any differences to be settled, particularly in collection letters.

The filing is now usually done in vertical files, using steel or wooden cases built for that purpose. The enclosures are manilla folders, and the filing is done by number, by subject, or by name, the latter lending itself to many classifications, such as geographical arrangement, with as many sub-divisions as the needs may require. In some cases the filing is done by number, each correspondent being given a number, which number appears on the manilla folder and is indexed by card alphabetically.

The classification may also be by subjects, and the letters filed under subject and there classified by names or numbers; but the more satisfactory way is to file by names, as the name of the person or the corporation is always known.

If filed by number, there must be a card index to locate the number, making the additional work of finding the number both before filing and before reference. Thus, the letters of the First National Bank of Boston would be under file No. 175, and all letters from that bank would there be filed. In the card index, all Massachusetts correspondents would be indexed under that State and all Boston banks under Boston, and we would, therefore, look under Massachusetts—Boston—First National Bank, and find No. 175. Turning to file 175 we would find the letters arranged by dates. There might also be a separate file for individuals and one for banks.

It is the custom of banks to keep letters for a certain length of time before destroying them. Thus, letters of each day are finally put in bags and labeled, and each day a bag is destroyed. Banks must decide for themselves how long to keep correspondence. Some keep letters six years, others longer, and others destroy remittance letters after the account has been reconciled. It is a matter of judgment; but merely remittance letters need not be kept as long as letters involving more important subjects, for the account once reconciled, the letters which contained the items are no longer of vital import. But due allowance must be made for errors and time allowed for adjustments before correspondence is destroyed.

A PRACTICAL FILING SYSTEM

Bank correspondence in an institution of average size may be divided as follows:

1st—General Correspondence.

2nd—Corresponding Banks.

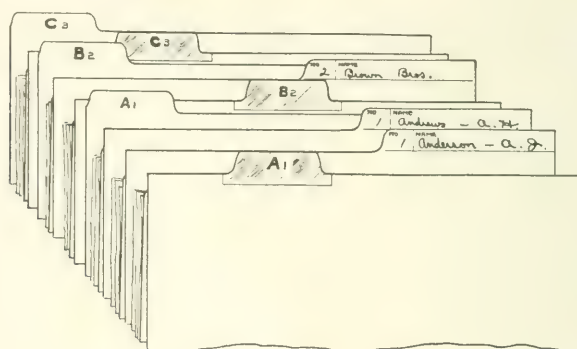
3rd—Miscellaneous Banks.

4th—Credit File.

Apart from the above, the savings, trust and safe deposit departments of a large bank will require their own files.

1st—General Correspondence.

Illustration No. 1 shows the best method for filing gen-



NO. 1

FOR GENERAL CORRESPONDENCE

eral correspondence with customers and others. This is known as the Direct Name System of Vertical Filing. The principle of the system is to keep together in one folder, all correspondence with each important correspondent, and to file miscellaneous letters in alphabetical folders.

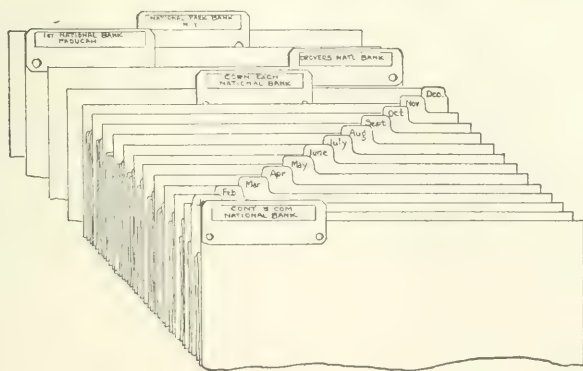
Grey pressboard guides with celluloid tabs bear the divisions of the alphabet as shown in the illustration. The guide tabs are arranged in two rows at the center, and just to the left of the center of the file drawers. In the case of a small bank a simple set of No. 25 guides—one for each letter of the alphabet—is sufficient. For larger files a larger sub-divided set may be obtained, sets being available in any desired size.

For important correspondents there are individual folders at the right of the file with wide tabs on which are written the names. Miscellaneous letters are filed in alphabetical folders with tabs at the left edge of the drawer. The tabs of all of the folders are of the same height as the guide tabs, and reference to the folders is thus facilitated.

The guides in any set are numbered consecutively, commencing with No. 1 on the first or "A" guide, and running to No. 25 on the "Z" guide in the case of a set of No. 25 guides; to No. 40 in the case of a set of No. 40 guides, and so on. The alphabetical folders at the left of the file are printed and numbered to correspond with the guides. When an individual folder with right-hand tab is made out, it is numbered to correspond with the guide behind which it belongs. This numerical feature acts as a check on accuracy in refiling folders. When a folder has been removed for reference it is filed with the greatest speed and accuracy through the simple expedient of noting the number and placing the folder behind the guide of that number. This is, needless to say, much quicker and more accurate than if it were necessary to read the individual's name and then find the alphabetical guide behind which that name belongs.

2nd—Corresponding Banks.

The volume of matter to be filed in the case of corresponding banks requires a separate and distinct division of the file for each bank. Illustration No. 2 shows how this

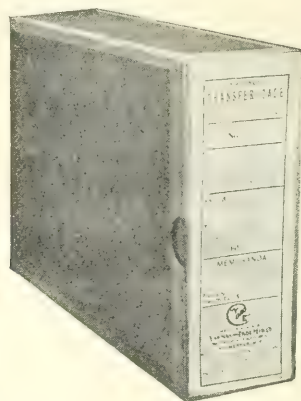


NO. 2

FOR CORRESPONDENCE WITH CORRESPONDING BANKS

division is accomplished through the use of pressboard guides with metal label holders for each bank. All correspondence, remittance and collection letters are filed in folders back of the proper bank guide. Monthly folders are generally used for this purpose as shown in the illustration, although in the case of some of the smaller corresponding banks, it may be sufficient to use an expanding folder, or to use bi-monthly or semi-annual folders.

The method shown in the illustration will answer in the case of small and medium-sized banks. In some of the larger banks it is necessary on account of the bulk of the



TRANSFER CASE FOR FILING OLD CORRESPONDENCE

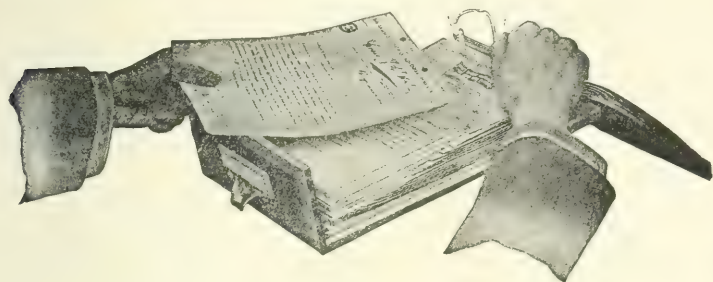
matter to separate it into classes through the use of colored folders. Each folder may contain the correspondence for a period of one or two months. These colored folders are filed directly back of the guide in place of the monthly folders. Each class of correspondence is distinguished by a different color, and the tabs of the folders are printed in some such classification as follows: "Official," "Sundry," "Acknowledgments," "Collections," "Cash Letters and Returns for Transient Accounts," "Letters of Advice."

The contents of a file of transit correspondence is generally transferred at from intervals of two to six months, depending upon the length of time during which reference is desired to these original documents. It is transferred to vertical drawer style transfer cases, where the folders are kept in the same order as in the active file.

In the case of small banks where reference to transit

items is infrequent, the plan is sometimes followed of filing all this correspondence by date, using month and day guides. The vouchers for each day are arranged in alphabetical order.

The Shannon file is also used for this purpose, the illustration showing the Shannon file drawer with double arch. All papers are perforated and filed over the arch in order of date, and a single drawer will hold a month's correspond-



THE SHANNON FILE

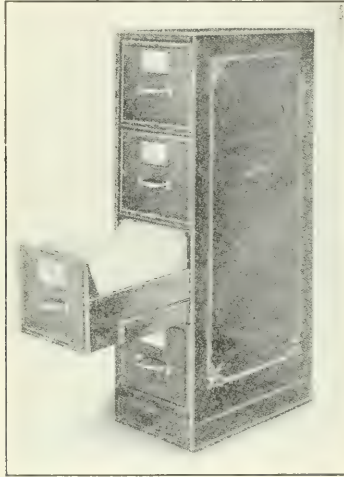
ence in the case of a small bank. The entire contents of the drawer is removed and put in a Shannon transfer case, as shown in illustration, where it may be secured at any time by reference, first to the date, and second to the name.

3rd—Miscellaneous Banks.

On account of the similarity of bank names, it is best to file this class of correspondence by towns. Illustration page 534 shows a very convenient method. Alphabetical celluloid guides are used just as shown in illustration, but they are for dividing town names instead of individual names. Each bank is given a folder with a right-hand tab on which is written, first, the name of the town, and below it the name of the bank. Each folder is numbered to correspond with its guide which effectually prevents mis-filing. Note folders for First National Bank of Alton and Cairo National Bank, in the illustration. If a letter is received for some other bank in Alton, it is filed in the "A" folder at the left of the drawer, which is reserved for miscellaneous purposes.

index arranged alphabetically with all desired cross references.

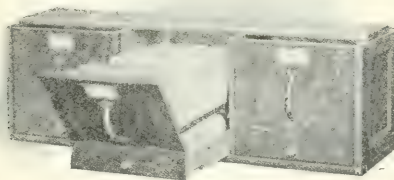
The Direct Name System which is shown in illustration 1 may also be used to good advantage as a credit file, pro-



CREDIT FILES

viding as it does a separate folder for each customer in which are filed all original papers regarding that customer's credit.

There is a decided tendency toward the use of steel cabinets for filing bank records. This originates in a desire to protect records against fire, but it is nevertheless true that a single wall steel cabinet offers much less resistance to fire



FOLDERS IN DRAWER

than a well-made oak cabinet. If protection is to be assured a cabinet with double walls throughout, lined with asbestos, should be obtained. The illustration shows such a steel cabinet of the four-drawer upright style used for bank corre-

spondence. All outer surfaces of this cabinet are composed of double steel walls completely insulated by cellular asbestos. Every drawer is equipped with a safety latch which automatically fastens the drawer when it is closed, and effectually prevents destruction of the papers from a small



MANILLA FOLDER FOR FILING CREDIT INFORMATION

blaze which would otherwise consume the contents of an open drawer. These steel cabinets are a radical departure from any cabinet previously placed on the market since all other cabinets lack the double walls and asbestos used throughout as well as the drawer catch feature.³

³The above was prepared by the Yawman and Erbe Company of Rochester, N. Y., by request of the author for what they considered a proper filing method for the mail of the average bank, and acknowledgement is here made for their valuable contribution.—W. H. K., Jr.

CHAPTER XVI.

COST ACCOUNTING AND ANALYSIS OF ACCOUNTS

The tendency of all business is to a more accurate and scientific basis of operation. It no longer suffices to know the approximate cost of producing an article, and the cost of selling it, competition having compelled manufacturers to know to an exactness what the cost of production has been, including a proportionate charge for all overhead expenses incidental to marketing the product. Loose methods have resulted not only in loss of business but in bankruptcy.

To figure that cost of raw material plus wages equals the cost of production is deceptive; for in the cost of production must be included depreciation and wear and tear on plant, rent, administration charges, duty, freights, etc., so that each article shall, in its selling price, include some portion, however small, of the general overhead expenses, as well as return its first cost and a profit.

Banking of late years has followed the same lines. Bankers are no longer satisfied to know that they have made a profit—they want to know where the profit came from and how it arose. It is needful that the sources of profit be known in order that the sources of loss be also known. While losses must attend all business, the source and the reason for the loss must be located, else the little leaks may spring into big ones.

Banks are more and more giving attention to the exact cost of doing business. They rightly want to know who are profitable customers and who are not. It may be that a depositor carries a good balance, and on its face would seem to be decidedly desirable, but when it comes to determining what the account costs the bank, and what it earns, it may show a loss.

BANK PROFITS

The general sources of a bank's profits are: (a) The loan of its capital; (b) the loan of its deposits; (c) ex-

change on collections; (d) investments; (e) profit on circulation.

The funds from which it derives these loan profits come mainly from its capital and its deposits. The profits from bank note issues under the National Banking Act are not large, due to the low income from bonds, their high cost and the expenses attending note issue.

The profit from making acceptances is yet a new venture in our banking scheme, while exchange profits will, under the Federal Reserve Banks, be greatly reduced. The loan of its deposit funds is, therefore, the main source of profit, and before it can loan money it must first obtain it.

LOCATION				PRESENT DATE				MONTH						
NAME				DATE OPENED										
1913		1914		1915		1916		1917		1918		CERTIFICATE OF DEPOSIT		
AVERAGES	AV BAL	NO OF ITEMS	AV BAL	NO OF ITEMS	AV BAL	NO OF ITEMS	AV BAL	NO OF ITEMS	AV BAL	NO OF ITEMS	AV BAL	NO OF ITEMS	%	AMOUNT
JANUARY	00.		00.		00.		00.		00.		00.			00.
FEBRUARY	00.		00.		00.		00.		00.		00.			00.
MARCH	00.		00.		00.		00.		00.		00.			00.
APRIL	00.		00.		00.		00.		00.		00.			00.
MAY	00.		00.		00.		00.		00.		00.			00.
JUNE	00.		00.		00.		00.		00.		00.			00.
JULY	00.		00.		00.		00.		00.		00.			00.
AUGUST	00.		00.		00.		00.		00.		00.			00.
SEPTEMBER	00.		00.		00.		00.		00.		00.			00.
OCTOBER	00.		00.		00.		00.		00.		00.			00.
NOVEMBER	00.		00.		00.		00.		00.		00.			00.
DECEMBER	00.		00.		00.		00.		00.		00.			00.
TOTAL	00.		00.		00.		00.		00.		00.			00.

A CROSS INDICATES THAT THE BALANCE IS LESS THAN \$100

CARD RECORD OF AVERAGE BALANCES

It is obvious that if a man deposit with a bank a certain sum of money which the bank may use as its own, repay him as he orders, but in the meantime loan part of it out, the bank derives a distinct advantage. It is not all net profit, because there is the cost of keeping the loaning machinery in operation and the cost of the money itself. The difference between what it costs to carry the account and to administer it, and what is received from loaning the funds is the bank's profit.

But if the deposit is not money, but a form of credit which must be converted into money and cannot be loaned until so converted, it is plain that the bank does not get the profit attending a cash deposit. And if incidental expenses creep in that were not contemplated in the cost of obtaining

and administering the account, the profit will be reduced accordingly.

In such cases careful analysis of the account must be made to determine its profitableness, or what would, on the face, seem to be a profitable account may be a losing one. Many banks have concluded that the better plan is to charge for the collection and pay interest if the balance warrants; while others make no charge for the service and pay no interest. It is a matter of opinion.

PROFITABLE AND UNPROFITABLE ACCOUNTS

The function of the analysis department is to determine the profitableness of the accounts. This process is described subsequently. But as a proposition in finance and banking, every account must show a profit to the bank in some form, however remote, or it is not a desirable account. There are, in all places, men who carry bank accounts simply for business convenience. They never stop to consider the right of the bank to a profit on the account. They draw against uncollected funds, deposit only enough to meet their checks as they calculate they will be presented, and are more or less short of funds all the time. These, like the proverbial poor, will ever be with us. What to do with them is the problem. Some banks have decided to make a charge if the average balance is below what has been decided to be profitable; while others suffer the evil with the best grace possible, and all would welcome the day when every depositor recognizes the right of the bank to a profit on his account and acts accordingly.

An interesting calculation was made by a clerk in a large city bank. On one account in this bank there were deposited a large number of "collection" notes at stated intervals. So far as ordinary analytical processes showed, the balance carried, \$25,000, was sufficient to cover all expenses in the nature of exchange and time cost, the usual test to which an account is put. There was, however, another element in this case which was carefully estimated. If the bank had received from all its \$50,000,000 line of deposits an equal number of items for every \$25,000, there would have been required at least 7,500 clerks to handle only this particular end of the business!

THE BANK'S SERVICE TO THE DEPOSITOR

The bank performs a service to the depositor that no other institution does. Aside from its function of note issue, deposit and discount, it occupies a very useful place in the business scheme. Let us see what the bank does for the depositor aside from lending him money. It receives his funds—money, checks and other instruments of credit on deposit and for collection. The money it keeps safely; the other items it turns into money sometimes without cost. It furnishes him with a check-book and pass-book free; pays his checks as he directs; returns the receipted vouchers with a statement rendered; often makes up his payroll; furnishes money in such form as is requested; guarantees that the party to whom the check is payable has received the money; and warrants not to pay on forged orders. The value of this service is frequently forgotten or unappreciated.

With this checking privilege and all it means in mind, it is not unreasonable to ask the depositor to keep a balance commensurate with the service rendered. The bank is under expense in doing all this, and it is most assuredly worth something to the depositor to have it done. But in the competition for business, and the tendency of customers to ask interest on their balances, banks have been paying interest on balances that are too small to earn the interest credited and show a profit to the bank, when the acid test of cost accounting is applied. The result has been, in not a few cases, that the bank has built up a deposit line and lost in net income, so that liquidation became necessary in order to save the institution from becoming insolvent. Many large banks whose names are now in banking history, have suffered from the evils of paying too much for business.

THE QUALITY OF THE ACCOUNT—ITS INFLUENCE

It is of importance in all banks, but particularly in large ones where the depositors are not all known personally, to determine what kind of an account the customer carries, and also the influence of the depositor on other depositors. The individual balance is important, but other balances that exist because of the depositor's friendship for the bank are equal-

Every account on a bank's ledger has some bearing upon the profit or loss account of the bank. The banker aims to serve the public, but should not do so at the expense of his stockholders, to whom is due a profit from the use of their capital. The bank justifies its existence through its many collateral services rendered to both customers and those who are not. The banker is not a philanthropist, but a business man, realizing that service brings its own reward, and he who serves best obtains the largest reward. The banker cannot charge for every service rendered; to do so would be to invite competition and lose much profitable business; but he should be compensated for the valuable and steady services which attend the keeping of an account with a customer.

But if it were not for the accounts on its books, the bank could not exist, and the handling of accounts is the reason for the bank's machinery; the capital and surplus being in the nature of a guaranty fund which the stockholders have contributed to safeguard the accounts. On the surface the large accounts would naturally seem to be the paying ones; but when it is considered that upwards of 50,000 and even 100,000 items have been known to go through a single account in a month, the cost of clerical labor will manifestly be greater than on an inactive balance, and due consideration given in the cost accounting scheme to the labor cost.

The small account is the problem. They are numerous, and the balances often small—so small as to be almost a negligible quantity. And the problem is whether to refuse them, and thus drive away future business, or make a charge for carrying them, or accept them as they come. A small balance carefully nursed along may prove in the end a most desirable one. The owner may have a struggle, and the account may show the evidence thereof, but once he gets established he may prove a very desirable customer, and the poor depositor often becomes a very good borrower; and a good borrower is often excused for keeping a small balance, for good borrowers are the life blood of banking, and good borrowers are as necessary as good depositors.

PENALIZING SMALL BALANCES

There are banks and trust companies in every large city that have adopted the rule that if a depositor does not keep

an average balance of a certain amount (in some cases \$200), a small fee is charged, which penalizes drawing the balance below that amount. The reason is that the bank has decided, either upon careful investigation, or upon mere estimate, that a balance of less than a certain amount is not a profitable one; although in certain cases the rule has been made discretionary, as it necessarily must be; for many small accounts are in the nature of accommodation to those who are connected with firms and corporations carrying large balances, and the small account is a courtesy to one of the officials. If the reason for the charge is explained to the customer, he will quickly see the justice of the bank earning a profit on every account, however small that profit may be.

COST ACCOUNTING IN BANKING

Tersely stated, the proposition in cost accounting in banking is to apportion the expense incidental to an account to that account, and to credit to the account its proportion of earnings, which may be more accurately ascertained than the costs. One of the aims of cost accounting is to arrive at the usable balance. For example, a bank might have an account with \$10,000 average balance, and one-half the amount might be in process of collection, and, therefore, the bank has but \$5,000 as a usable balance. From the \$5,000 the reserve must be deducted and the balance must carry the burden of earning the interest paid on the whole account. If the loanable balance earns less than the whole account costs, it is a losing proposition. The actual usable balance is, therefore, the basis upon which all bank earnings are founded.

The first essential is to ascertain the loanable balance by finding the average balance, from which must be deducted the amount credited, but in process of collection, and the reserve. It is obvious that a bank cannot loan what it does not possess, and funds in the mails are not funds in hand, and assuredly the bank cannot loan its reserve. Therefore, from the average balance, or actual balance, these items must be deducted. The earning power of money must then be ascertained for the period, and the account credited with its proper proportion.

ADMINISTRATIVE COSTS

The greatest problem in cost accounting for banks as well as commercial houses, is the administration costs. It is comparatively easy to determine how much clerk hire, stationery, postage, rent, light and heat should be apportioned to each department of the work, but when it comes to prorating the administration costs, it is difficult to adequately determine how much of the supervising expense belongs in a single department. It might be done by determining what proportion of the gross profit each department contributes, and charging thereto for administration a proper proportion of salaries, etc., but to carry the charge down to individual units is often difficult.

Cost accounting being an inexact science, many of the fixed charges must necessarily be estimated. For instance, we have five adding machines in the transit department. They cost \$500 each. Their life may be six years or ten; but the cost should be distributed as nearly as possible over the life of the machine, and its cost made part of each year's operations; but at best this would be an estimate.

EXCHANGE CHARGES—INTEREST

In order to know the cost of an account as respects exchange charges and loss of interest, the items that are collected must be analyzed, their cost known, and the time consumed in making the collection figured, so that the interest loss will be possible of computation. Thus, an item sent to San Francisco will consume about five days going, the same returning and probably one day's delay in the bank. Twelve days' interest is, therefore, lost before the funds can be loaned, and this is a factor of no small import.

The National Bank Act has so framed the banking laws of the country that the reserve cities become almost involuntarily the clearing centers as well. But while this is logical and the most convenient method of transferring credit in the shape of checks, yet the bank act has left us absolutely without a common medium of exchange. We are forced, therefore, to use actual money, which is expensive to ship; or New York funds which, in view of the clearing-house rules of that city, are expensive to create. There is, therefore, a

considerable item of expense placed upon the banks in the handling of the commerce of the nation, the only offset to which, except an actual charge, is the compensating balance of the depositor. This expense is represented chiefly in what is known as "exchange charges" which is perhaps the subject of the greatest importance in cost accounting. That there are all sorts of abuses and evil practices abroad in the land is a matter with which most bankers are familiar. These conditions are of especial import to the analysis department whose duty it is to see that the bank is not imposed upon either by its customers on the one hand, or by collecting banks on the other.¹

THE EARNING POWER OF MONEY

To estimate that money earns an average of five per cent. is mere guess work; and to conclude that a certain rate has been earned on a certain balance is to segregate each loan and apply it to some particular deposit—an impossible task. The correct way is to ascertain the actual earning power of the bank for a period, by dividing the interest received from loans and investments by the average amount outstanding, thus getting an average rate. This being ascertained, the account may be credited with its earning power, and the result known to a considerable degree of accuracy. Each account is then treated as if it were the only account on the books.

SPECIAL COSTS

There are some accounts that have special costs attending their work, which should be a charge to them individually and not to all. For instance, one large bank handles the accounts of a railroad. It sends messengers each day to collect the funds turned in by the conductors and agents, in envelopes sealed, as representing their trip returns and cash receipts. It counts the money and proves the listing. The checks, if any, are collected, payrolls made up, dividend checks prepared, and, in fact, the bulk of the cash receipts and many of the disbursements of the railroad are made not through, but by, the bank. The cost attending this ac-

¹Quoted, author not known.

ANALYSIS OF ACCOUNT

Rate M.

[illegible]
$$Y = N(0, I)$$
$$\mathbb{E} \mathcal{K} \in \mathcal{L}(\mathcal{H}_1, \mathcal{H}_2) \text{ is } \mathcal{K}^{(2,0)} \text{ for } M, \text{ with}$$

Logarithmic

Average	Looseable Finals
100	100
90	90
80	80
70	70
60	60
50	50
40	40
30	30
20	20
10	10
0	0

5

1000 Avenue B, N.Y.C.

1000 Avenue B, n.e.

Exchange with us: 699

Exchange with us: 699

Exchange with us: 699

REMARKS

ANALYSIS SHEET

count is much greater than on the accounts as a whole, and its greater cost should not be placed on the ordinary accounts, which have no such special favors. In return the company carries a large and profitable balance.

For every bank to go into the matter of cost accounting extensively and scientifically, would not be warranted; neither would the other extreme of too much laxness be wise. A scheme too elaborate might cost more than it would save; therefore, a middle ground might be chosen that will give the results desired without the burdensome expense attending.

Cost accounting simply aims to furnish information, but does not attempt to dictate the policy of the bank toward a customer. That an account shows a loss, is not to say it should be closed. The analysis is a straw to show which way the wind blows and the officials must decide what policy to pursue.

A wide divergence of opinion exists in these matters and is easily accounted for, as men differ as to what is or is not a proper charge against an account, and the methods by which this charge is to be ascertained. Given the same problem and the same state of facts surrounding it, no two would agree in the result. Mr. E. H. Ensell of the National City Bank, New York, has made a close study of this question, and shows the possibilities of error in these calculations to be great. Writing at different times and in different places, Mr. Ensell says:

THREE THEORIES OF APPORTIONMENT

“There are three distinct and separate theories in existence with regard to the apportionment of the earnings and expenses among the accounts. The first theory is that all the service of the different departments of a large commercial bank should be held at the indiscriminate disposal of all the customers; there should be no distinction made between a maximum use or a minimum use of the benefits of the various departments; no discrimination between an account that requires much labor or little labor in its handling. This theory works well where there is no wide margin of difference between the most active and the most inactive account.

“The second theory is that all the service of the different

departments represents some definite cost that may be traced to the accounts that take advantage of this service and should be compensated for either directly or indirectly in each case. This theory represents the ideal condition, but could never exist on account of the indirect influences continually at work, and which do not always appear on the surface.

"The third theory is a combination of, or a compromise between the other two theories; that is, some of the departments exist as a general accommodation, the value of which may not be determined in dollars and cents, but that the service of other departments represents a definite expense that may be found to exist for the benefit of one certain class of depositors over another class. It is on the basis of this third theory, the reasonable middle course, we have the two natural units of cost in the banking business. First, the unit of cost on the basis of dollars of balance to be administered; second, the unit of cost on the basis of labor, or items to be handled.

"In order to arrive at these two units of cost it is necessary to separate the cost of the two different classes of service. The administration expenses must be separated from the labor expenses. In considering the labor expenses only the departments whose time is continually occupied in handling items should be included, such as, the receiving teller, the mail teller, the check desk and bookkeepers, the transit and city collection department, in short, all the labor departments. All other departments, such as the loan department, the credit department, the discount department, etc., are occupied in the earning operation. They handle a minimum number of the items and the cost of these departments is to be applied to the accounts on the basis of dollars of balance to be administered.

"The accounts then are the raw materials with which a bank does business. It is no longer a question of how much the accounts cost or earn—since all the cost and earning has to be passed back to the accounts—but how to apportion the cost and earning on an equitable basis.

"There are two fundamental mechanical operations in the banking business. First, the earning, and second, the labor operation. The earning operation is principally the lending of money. It is on this operation we have the unit

of cost on the basis of the dollars of balance to be loaned or administered. The second unit of cost in the labor operation is best reduced to the handling of items, and we have the unit of cost of each item handled in each different department.

UNITS OF COST

“The question now arises how to figure out the units of cost on these two different operations. There are a number of methods, some very complex and complicated, others that are simple and direct. Some of the methods attempt to apportion the floor, desk room, overhead and fixed charges, and to divide the clerks’ and officers’ time, etc. This method is complicated and defeats its own purpose.

“The most direct and simple method that would include all the elements, both clerical labor and a right proportion of the fixed charges, overhead expense, and administration expenses, of cost in handling items in the items department would be to charge into the items department: First, those expenses that are direct, such as clerk hire, bookkeepers, books and stationery, etc.; second, to include in this amount already charged to the different items departments a fair proportion of the other fixed charges. This amount may be best found by adding the totals of the direct expenses charged to the different items departments and see what ratio they bear to the total of all other operating expenses, and by reducing the general operating expenses an amount in proportionate ratio which the direct figures already in the items departments bear to the general operating expenses, and distributing this amount deducted proportionately among the items department we now have a very accurate proportion of fixed charges, overhead expenses and administration expenses in the items departments to cover the indirect expenses in handling the items.

“The remainder of the general operating expenses would be applied to the dollars of balances left on deposit to be administered. By dividing these general operating expenses by the number of dollars of deposits would give the unit cost on one dollar of deposit to cover the expense of administration. By dividing the total of both direct and indirect expenses of the different items departments by the number of

[illegible]

3 Days for	15	42.9	—	46.287
4 "	8	83.4	—	95.936
5 "	14	47.8	—	72.370
6 "	"	44.1	—	246
8 "	"	"	—	"
10 "	"	"	—	"
Total 30 Days	38	73.2	—	154.259
Daily Average Amount in process of Collection, \$ 5.142				

Average Daily Balance	30	00	00
Deduct			
Average in process of Collection	5	1	42
Net Balance	24	85	8
Deduct			
25 per cent. Reserve	6	2	15
Loanable Balance is	18	63	00
At 5 per cent. in			
Days yields	25	42	
Exchange Cost			
Interest Allowance	5	18	
Net ~~Loss~~ - Loss			86

1.40 % on	1.500 is	.38
1.20 % on	13.929 is	6.96
1.10 % on	8.865 is	8.86
1.8 % on	14.447 is	18.06
3.16 % on	41 is	.08
Total Exchange Cost		35.42

Courtesy Merchants-Manufacturers' National Bank, Baltimore.)

items in each department would give the unit of cost for handling one item in each of the items departments.

"The analysis of an account after any direct elements of cost were charged directly, would appear like this: In the first place, you have the general daily average balance; this is the average balance as shown by the ledger. It is necessary to reduce this average by the average amount of cash that has already been credited up, but is continually outstanding in the process of collection; the remainder of the average balance thus reduced would have to be further reduced by the percentage of reserve that a bank is required, either by the national or State law, to keep idle in the vault. The final result is the available loanable balance with which a bank has to do business. This available balance at the average earning rate of interest will be the amount the account would earn. To this amount earned must be added the amount of exchange earned by the account. The two added together would give the total earning capacity of the account for the period under consideration.

"On the other side of the analysis would appear the daily average balances at the unit of cost per dollar for administration, the number of items handled in each department at the unit of cost for each class of items, the amount of interest paid to an account on its net average balance, and the amount of exchange paid for handling the out-of-town items for the account. All the costs to be added. The difference between the two sides of the analysis would show what an account earned or cost during the period.

"In all banks there are a number of accounts having some peculiar cost or earning feature attached to them by reason of which they could not be considered in a class with any other account; such accounts would have to be analyzed separately. It would be impossible to analyze each account separately, however, therefore, the accounts must be analyzed by classes or groups.

"For this reason the result of three different methods of analysis will be compared. A wide margin of difference will be shown to exist between the results of the different methods: (a) The lax method of analyzing an account by approximating its cost through estimating the cost of labor to handle it; (b) the more definite analysis of an account, but still without proper regard for the indirect or 'overhead'

charges; and (c) the analysis of an account on the approved scientific basis.

"In order to make the illustration more clear the same large, very active account with an average balance of, say, \$1,000,000 will be used in each case. The period of time under consideration is one year. Regarding the comparative worth of the different methods used and the results obtained certain definite conclusions may be arrived at. The account used to illustrate may be said to be an extreme example; still it is a possible one and the final result in example 'C' will indicate how unproductive an apparently valuable account may be.

"In the first example, 'A', a common method used at present is to attempt to arrive at the cost of an account by determining the labor or clerk hire expense. This is accomplished by averaging the cost of clerk hire and estimating its value as in the following illustration. Some bank officers are willing to guess at the earning capacity of an account. They consider only the cost of handling on a direct basis, eliminating the important elements of administration expenses, fixed and overhead charges attached to the handling. They merely make a mental calculation to allow for expenses that do not appear on the surface and assume that roughly an account is worth what it may earn on the gross daily average balance less the direct expense of handling. To make the contrast between the three different methods of analysis more striking the average balance in example 'A' will not be reduced by the amount in transit or the reserve held against the deposit.

EXAMPLE "A".

ESTIMATED COST ACCOUNT

Daily average balance, \$1,000,000.

Average earning rate $4\frac{1}{2}\%$	\$45,000.00
One man $2\frac{1}{2}$ hours daily account current for year.....	\$757.30
Two men 15 minutes daily to handle acceptances.....	151.30
Three men $2\frac{1}{2}$ hours 4 times a year, account dividends.....	30.00
One man 10 minutes daily to examine indorsements.....	32.00
Four men 20 minutes daily examining signatures.....	99.40
One man four times a year 15 minutes, special.....	79.00
One man 10 minutes daily handling checks.....	50.50
Total cost of handling account.....	1,199.50
Estimate value of account for year.....	\$43,800.50

"According to the foregoing example 'A' the estimated labor cost of handling the account for the year would amount to \$1,199.50, while the daily average balance of \$1,000,000 would have earned \$45,000 at the average earning rate of four and one-half per cent.

"The estimated cost of clerk hire in connection with an account, however, is not accurate enough to cover the cost of handling even without considering any other direct or indirect expenses attached to an account. There is considerable time of clerk hire which is lost or unaccounted for; therefore, this method of estimating the cost of an account is very inaccurate. Further, to assume that a daily average balance, as shown by the books represents actual loanable funds, is a false position, for a daily average balance usually contains items taken for cash that are outstanding in the process of collection; and also no allowance has been made for the twenty-five per cent. reserve.

"In the following example 'B' all the direct cost of labor will be charged to each of the 'labor' or 'items' departments, so that the lost time unaccounted for above may be included. Dividing the total cost of labor charges to each of the 'items' or 'labor' department by the number of items handled in each department during the period will give the unit of cost for each item on the basis of direct expense only.

EXAMPLE "B".

A MORE CAREFUL ANALYSIS OF THE FACTS.

Daily average balance.....	\$1,000,000	
Less average amount in transit.....	200,000	
	\$800,000	
Less 25% reserve.....	200,000	
Actual usable balance.....	600,000	
Earning at average $4\frac{1}{2}\%$ on \$600,000.....		\$27,000.00
270,000 items receiving teller at .004=.....	1,080.00	
202,000 items clearing house at .0011 =.....	222.20	
35,000 items check desk at .0075 =.....	265.50	
32,000 items city collections at .01 =.....	320.00	
1,000 items transit desk at .005 =.....	5.50	
104,000 items from clearing house at .0075 =.....	780.00	
		\$2,673.20
Value of the account for year.....		\$24,326.80

"In the foregoing example 'B' the direct cost of labor alone has been charged to each department, eliminating the indirect charges. The unit of cost of each item in each different department has been found by dividing the direct expenses charged to each department by the number of items handled. Multiplying the number of items handled for the account in each department by the unit of costs for items of its class, will give the total cost for all items of that particular class. In this example the daily average balance has been reduced by \$200,000, the average amount in transit, and also by a further reduction of \$200,000 for the twenty-five per cent. reserve. The earning capacity of the account in example 'A' was \$45,000, no allowance being made for transit items, or reserve, while in example 'B' the earning capacity was \$27,000 after proper allowance has been made for transit items and reserve. But this is not the real point of difference between the two, for if no actual calculation were made to cover transit items and reserve in example 'A' a certain mental allowance would be made for same. The real difference between example 'A' and example 'B' is that the cost of handling items for the account is more than double in the latter where the unit of cost per item is used as a basis, than in the former where the approximate average time of clerk hire is used as a basis.

"In neither of the foregoing examples has attention been paid to the apportionment of the overhead charges, the fixed charges, or the administration expenses that are incurred indirectly. Many other important elements have also been purposely omitted from examples 'A' and 'B' in order to emphasize their value and importance. These elements should be included in any analysis that is to be complete and accurate. These elements are cost of administration expenses attached to the handling of the dollars of balance, interest paid to the depositor on his average balance, special work and specific expenses.

"In the following example 'C' all the scientific principles that have been evolved to date will be used to demonstrate the correctness of the theories set forth:

EXAMPLE "C".

APPLICATION OF THE SCIENTIFIC PRINCIPLES.

Daily average balance.....	\$1,000,000	
Less average amount in transit.....	200,000	
Net average balance	800,000	
Less 25% reserve	200,000	
Actual usable balance.....	\$600,000	
Earning an average of $4\frac{1}{2}\%$ on \$600,000.....	27,000	
Exchange received	20	
Total earning capacity.....	\$27,020.00	
Cost of handling:		
270,000 items receiving teller at .008.....	\$2,160.00	
202,000 items clearing house at .0022.....	444.40	
35,000 items check desk, in, at .015.....	525.00	
32,000 items city collections at .02.....	640.00	
1,000 items transit desk at .011.....	11.00	
104,000 items check desk, out, at .015.....	1,560.00	
Currency, one man 1 hour daily.....	150.00	
Special work	43.81	
Clearing House	36.84	
Exchange cost	5.00	
\$1,000,000 daily average balance, cost of administration....	5,000.00	
2% interest on net average balance of \$800,000.....	16,000.00	
		\$26,576.05
Net value of the account for year.....		\$443.95

"It will be noticed in example 'C' the unit of cost of handling an item is twice the amount of the corresponding unit of cost as shown in example 'B', for the reason that the direct expenses together with a proper proportion of the overhead charges have been added; that is, the direct and also the indirect expenses are included in the unit of cost in example 'C'. Further it will be noticed example 'C' contains other expenses and outlays that do not appear in either of the other two examples.

"In the scientific analysis 'C' it is intended to include every possible cost attached to an account, and also to show every earning made by an account; therefore, certain factors that have a prominent place in the accurate analysis 'C' have no place in either of the other examples—'A' and 'B'.

"In comparing the earning capacity of the three methods of analysis it would be unfair to assume that in example 'A' \$45,000 would actually represent what the account earned, for certain mental allowances are to be made for outstanding cash in transit and also the twenty-five per cent. reserve. The important thing is to definitely state the daily

average balance properly reduced by these two factors in the analysis, as is done in the case of examples 'B' and 'C'. It is also important to make allowance for the exchange earnings, even though the amount appears to be small.

"There are two elements of expense in example 'C': the cost of administering the dollars of balance, \$5,000, and the interest paid to the depositor, \$16,000. While some mental allowance has been made for these items in example 'A' and example 'B' they do not definitely appear on the analysis sheets now in common use. In connection with the interest paid by banks to their depositors it is well to note that banks pay interest on the net average balance, that is, the net average balance before it has been reduced by the twenty-five per cent. reserve which has to be kept idle and unproductive in the vault; furthermore, the banks pay a flat rate of two per cent. rather than a graduated rate that bears some relation to the fluctuating earning rate."

"By comparing the final results of the three different methods it will be seen how easy it is to be misled in guessing at the value of an account. In example 'A' the cost of handling the account by averaging clerk hire, was \$1,199.50; in example 'B' by using the direct elements of expense only, the cost was \$2,673.20; while in example 'C', where both direct and indirect elements were employed, the cost was \$5,576.05. Assuming that the mental allowance of interest, \$16,000, and cost of administration balance, \$5,000, were equal in all three examples the application of the scientific principles of cost accounting, which includes all elements of cost earning, is the only accurate method of measuring the value of an account.

"In order to arrive at the different units of cost, both the unit of cost on the basis of items to be handled, and the unit of cost on the basis of dollars to be administered, it is necessary to separate the two different classes of expense applicable to each. The total gross operating expense is a certain amount which includes every outlay of every character, the proper proportion of which must be borne by the labor or 'items' departments, on the basis of items to be handled; and the proper proportion must also be borne by the earning or administration departments on the basis of dollars of balance, left on deposit, to be administered. The accounts must bear the total gross operating expenses evenly appor-

tioned, both on the basis of balance loaned and on the basis of items handled.

"Reducing the total gross operating expenses by the amount of direct expense charged to the different 'items' departments, and distributing it among the 'items' departments, will leave an amount of general operating expense. Beside the direct expense charged to 'items' departments a proper proportion of indirect expense must also be charged to cover 'overhead' and administration cost; then according to the theories set forth in the last paper, the proportionate rates which the direct expense of all the 'items' departments bear to the general operating expenses (that is, the total gross operating expenses after they have been reduced by the direct expenses charged to the items departments), is the amount to be further deducted and distributed proportionately among the different 'items' departments for the indirect expense.

"To illustrate: In the receiving teller's department there is a direct expense of, say, \$10,000 or \$15,000 which gives a unit of cost in example 'B' of .004 per item. However, to this direct expense must be added the proper proportion of indirect expense, say, in this case, some \$10,000 or \$15,000 more; these direct and indirect expenses added together and divided by the number of items handled, gives the unit of cost in example 'C' .008, or twice the amount of the corresponding unit of cost in example 'B'. The same rule holds for all the other items departments.

"The remainder of the general operating expenses after direct and indirect expenses of 'items' department have been deducted, is the net general operating expense or cost for administering the dollars of deposit. Dividing this amount by the daily average of all deposits will give the unit of cost on one dollar, in this case .005."

Like all other matters of arithmetical calculation cost accounting can be carried to such an extreme that only a mathematician can understand the process, but all will agree that it is worthy of the study the problem invites. It is better to be too analytic than too lax: to be over-technical than careless. Mr. W. A. Buckley, assistant cashier of the Fourth Street National Bank of Phila., Pa., has given close and careful study to the question, and approaches the subject with an eye to minutiae that is admirable. By reason of

the care, the thought and the scientific results possible in such process, the paper read by Mr. Buckley before the convention of the American Institute of Banking at Rochester in 1911 is herewith given in full:

COST SYSTEM BASED ON EXPENSES

"The cost system that should appeal to bankers is one, by the use of which, it will not be necessary to make an analysis more than once in, say, two years. Such a method should necessitate a minimum amount of effort, as the cost units once found are practically permanent.

"The following described method is based entirely upon the expenses of the bank, which are separated into two classes; those caused by lending funds, and those caused by the activity of accounts.

"If all of the expense caused by an account for one month be deducted from its possible gross earning capacity, based on the average loanable rate of funds for the month, the result will be the net profit.

"With the method herein suggested, it will be necessary to have an analysis card for each account, with space for twelve months' figures. The card should show for each month the average ledger balance, the average amount of out-of-town items in the process of collection, the net working balance in bank, the amount of interest paid, the cash cost of collecting out-of-town items. In the latter column should be entered in red ink the cost of special check books. A column should be provided for the cost of administration based upon the number of items handled for the account in a given month.

"With the data on the analysis card, the profit on the account can be readily ascertained by using the average rate per cent. on loans and investments for the month.

"Illustration: Suppose the data to be as follows: Average ledger balance, \$10,000; average amount outstanding, \$2,500; net working balance, \$7,500; interest paid, \$16.43; cash cost of collecting out-of-town items (exchange paid), \$3.50; average loanable rate on loans and investments, 4.5 per cent. (approximated).

Average balance	\$10,000.00
Outstanding	2,500.00
Net working balance	<u>\$7,500.00</u>
Income on three-fourths of this amount, one-fourth in reserve (reserve city basis) at 4.5 per cent. for one month.....	\$21.08
Income from reserve agents at 2 per cent. on one-eighth of the amount	1.54
	<u>\$22.62</u>
Less interest paid	\$16.43
Exchange paid	3.50
	<u>19.93</u>
Profit for month	\$2.69

"If a bank collects all of its out-of-town items through its reserve agents at par, it is under no expense in this respect, except for postage and stationery, and the ordinary analysis referred to above is unnecessary. Where, however, a bank is under expense in collecting any out-of-town items deposited, either in exchange charges or in time outstanding before returns are received, such items should be subjected to an analysis. As nearly all banks make some attempt at an analysis covering out-of-town business, it will not be necessary to go into further details.

"If a bank's accounts were all inactive, the only employees necessary would be the officials required by law, clerks for the discount, collateral and credit departments, together with sufficient office-room for their accommodation, a board room, a vault and space for bookkeeping. The items of postage and stationery would not be worth consideration, and the other expenses enumerated above would be properly chargeable to the income on loans and investments, because it is incurred in the making and caring for loans. In addition to the expense of making and caring for loans, the handling of cash and time collections deposited, deposit tickets, cash and collection letters, the currency received and paid, and the checks and drafts paid and charged to accounts cause the expenses chargeable to administration.

ANALYZING THE EXPENSE ACCOUNT

"The cost of administration is composed of two elements: (a) The expense of lending the money deposited; (b) the expense caused by the activity of accounts. If the proportionate amount of the expense of administration be ascertained and added to the cost shown by the usual analysis, the worth of every account is known.

"In order to ascertain the proportionate amount of expense chargeable to A and B, it will be necessary to carefully analyze the expense account for a period of six months, and then take the average amount for one month. If some expenses are paid annually, only one-half of such sums may be included; and if any expenses are heavier in one semi-annual period than the other, they should be analyzed for one year and then averaged for one month.

"An approximation should be made of the percentage of the floor space used by the several departments to the total space occupied, to ascertain the proportionate cost of each department for rental. If the bank owns its building, the amount at which it is carried on the books, taken at the average loanable rate on money during the preceding six months should be used for rental cost, taking one month's rental as a basis. Banks carrying on their books the amount expended for furniture and fixtures should figure the interest on such sum for one month. If this has been absorbed in the expense account, the amount may be approximated and the interest for one month ascertained.

"Expenditures for new typewriters, listing and adding machines and other labor-saving devices, should not be included; but the yearly cost (for one month) of such machines should be entered under the salaries of the departments using them. The yearly cost is ascertained by taking the original price, less the rebate allowed when it is exchanged for a new one, and dividing the amount by the number of years the machine can be used.

"(A) As it is impossible to make and care for loans without incurring some expense, it is essential, for the purposes of analysis, to know the cost of keeping funds in the form of loans and investments. To ascertain this cost it will be necessary to bring together the expenses of the officials who pass upon loans and credits and the discount, collateral and credit departments for salaries, surety bonds, rental for floor space, stenographic work, luncheons, light, heat, telegrams, telephone service, expressage, postage, stationery and sundries. To this amount should be added: Retaining fee to counsel, Government excise tax, rental for floor space occupied by the board room, vault and corridor space leading to the quarters of the officials who pass upon loans and credits, compensation to directors (if any), subscriptions to

various trade organizations, credit bureaus, etc. The total is the expense of making and taking care of loans for one month.

“After deducting the various expenses mentioned above, the following are found to be chargeable to the activity of accounts: Rental for space occupied by departments handling items and quarters of the cashier, assistant cashier, stenographers and audit departments, lobby space used by customers leading to the various departments, stationery closets, letter files and lockers; salaries of officers in charge of administration, salaries of departments handling items, and, in addition, salaries of audit department, stenographers, telegraph clerk, telephone operator, day and night watchmen, letter filing clerk, messengers and porters; clearing-house expenses, luncheons; expense for postage, stationery, light, heat, premium on surety bonds of officials and clerks named above, telephone service, telegrams, expressage and sundries.

“As the analysis card shows the amounts of interest and exchange paid, and cost of special check books, these expenses should not be included. The following named expenses are not chargeable to either A or B: State tax; properly chargeable to income derived from the capital stock. Semi-annual duty on circulation; expressage on circulation, and other expenses on circulation, all of which are properly chargeable to income received on United States Government bonds.

“The cost of clearing-house, Government and other examinations should be approximated between A and B.

“Whether or not certain expenses are chargeable to A or B is certainly a proper subject for careful consideration and discussion, and in formulating a system for ascertaining cost-units every bank must decide them for itself. The following have not been included under either A or B: Cost of analysis department; advertising, and postage used in connection therewith; salary and expenses of traveling man; losses on loans and fees to counsel (other than the annual retainer).

“(A) It is suggested that the expense incurred in making and taking care of loans be considered as a certain percentage of the average loanable rate on funds, and that when this percentage is ascertained it be deducted from the

rate, using the reduced rate in computing the profit on an account.

"To find the rate per cent. on loans representing the expense of making and caring for loans, ascertain the average daily balance of loans and investments, not including United States bonds and premium on United States bonds for a period of six months. Multiply the loan expense by twelve (to get the yearly expense). Divide this amount by the average daily amount of loans and investments. The result will be the rate per cent. to be deducted from the average loanable rate for funds.

"Illustration: Suppose the average loanable rate for funds for a given month to be 5.25 per cent. and that for the past six months the balance of loans and investments, not including United States bonds and premium on United States bonds, averaged \$18,978,000. Expense incurred in lending funds (for one month) is \$3,352.78. Multiplying this amount by twelve (to get the yearly expense) gives \$40,233. Dividing this amount by \$18,978,000 gives .00212 or .212 per cent.; subtracting .212 per cent. from the rate for funds, 5.25 per cent., gives 5.038 per cent., which, therefore, should be used as the net loanable rate for funds in computing the profit on accounts.

"This formula apportions the expense on the average amount of loans and investments and, therefore, gives to the capital stock, surplus and net profits, which are, of course, in the form of loans and investments, their proportionate amount of the expense incurred.

"(B) To ascertain the cost units for the various classes of items passing through the bank, it will be necessary to count the number of items received by the bank for one month from each individual and bank account, and the number of checks and drafts paid and charged to each account.

"The analysis of the expense account should embrace a thorough examination of the amount expended for stationery, so as to apportion it among the several departments handling items. This amount goes into the first element of cost (see First Cost). Stationery used by officials and other departments in which items are not handled goes into the second element (see Second Cost).

"As certain expenses are incurred because of individual depositors alone, it is suggested, if extreme accuracy be de-

sired, that they be apportioned only to this class of depositors on the basis of the number of items handled for each account. In this class of expenses may be mentioned: Rental of lobby space used by customers in front of receiving, paying and other departments handling business for individual depositors only; salaries of clerks at counters in these departments; cost of stock check-books, deposit-tickets and pass-books.

"When the number of items handled during the month has been ascertained, the record will show the number deposited, by each individual and bank account, of each of the following mentioned items: City collections, out-of-town collections, city clearing-house and runners' items, out-of-town cash items, and, in addition, the number of checks and drafts paid and charged to each individual and bank account. In the case of city items (both cash and time) it would be well to count separately the clearing-house items, trust company items, and other items requiring presentation by the runners.

"As the figures for any one month will, in the majority of cases, be a fair index to the average number of items handled for an account, the number of each kind of items should be entered on the analysis cards for reference. It is hardly practicable to approximate the cost of handling coin and currency, and it would be well to assume that every account makes deposits and withdrawals thereof in fair proportion to the number of items deposited. Due allowance should be made, of course, for accounts that are exceptions to this general rule. As the number of deposit-tickets and letters received must necessarily be much smaller than the number of items which accompany them, it would likewise be well not to compute the cost of these separately, but to let it go into the cost of handling the items.

"If it be desired to know the cost of issuing drafts drawn on reserve agents and other out-of-town correspondents, it will be necessary to divide the salary of the exchange clerk, together with the cost of the drafts, advices and postage thereon, into the number issued during the month. Should the exchange clerk have other duties, approximate the time given to writing drafts and advices.

"The cost of handling time collections is considerably greater than that of cash items, because of the complete record that has to be made of the former, the separate en-

tries that have to be made of each time collection in the bookkeeping department, tracing, advising payment and other details. In the case of city collections there is an additional expense for postage on notices and the cost of telephone service, which materially increases the cost.

"It will be found that it costs more to handle items deposited by individuals than by banks, that out-of-town cash items are more expensive than clearing-house items; that trust company items are more expensive than clearing-house items; that other runners' items are much more expensive than trust company items; that the drafts paid and charged to accounts are considerably more expensive than out-of-town cash items, and that time items are from six to eight times as expensive as out-of-town cash items.

"In making up the cost unit it must be borne in mind that it consists of five elements: First, the expenses of the several departments that handle the items; second, the expenses of the officials and clerks who do not directly handle the items, and sundry other expenses; third, clearing-house expenses; fourth, postage; and fifth, cost of telephone service.

"First Cost.—In order to ascertain the first cost the following departments must be considered, because they directly take care of the items: Paying, receiving and note tellers, runners, transit, out-of-town collection, city collection, individual ledger and bank ledger.

"From the analysis already made of the expense account the cost of each of these departments has been ascertained for salaries, premiums on surety bonds, rental of adding and listing machines and typewriters, stationery and rent. It will not be necessary to ascertain the cost per item for these separately, as by adding them the net result is obtained by a single operation.

THE COST OF HANDLING AN ITEM

"To ascertain the cost of handling an item as it goes through the bank, make a record of the number of items handled by each department. As all items are handled more than once, it is necessary to make a record of them in every department through which they pass; and, if they are handled twice in any department, the number so rehandled

must be set down twice. This must be done so that the class of items handled twice may bear its proportionate amount of expense to the department. Divide the total expense of each department by the number of items handled. The result will be the cost in the department for each separate item. The runners collect items drawn on trust companies, etc., not represented in the clearing-house, and other items drawn on individuals, firms and corporations. As these latter items take up a considerable portion of the runners' time, an approximation of the time given to handling such items should be made so that the proper cost unit for this class can be ascertained.

"The total cost of each class of items is made up of the expense incurred in the handling of them in the several departments through which they pass. It is necessary, therefore, to multiply the cost unit in each department by the number of items in each class which it has handled during the month. When this has been done the several costs of each class of items are to be brought together to ascertain the total cost. Divide the total cost by the total number of items in the class to ascertain the cost of each separate item in the particular case.

"Illustration: Suppose the receiving department handles during the month the following: Deposited by individuals: 53,866 clearing-house items, 70,949 runners' items; 113,517 out-of-town cash items. Deposited by banks: 53,185 clearing-house items; 49,238 runners' items; 110,527 out-of-town cash items; total number of items handled, 451,282. The clearing-house items are taken care of in the receiving department. This brings the total number of items handled up to 558,333 (451,282 plus 53,866 plus 53,185). If the salaries paid to this department amount to \$765, the premium on surety bonds to \$32, the rental value of adding machines to \$56, the rental value of floor space to \$103 and the stationery cost of \$32, the total expense is \$988. Dividing the expense by 558,333 gives the cost of each item, namely, \$0.001769. Multiplying the number of items in each class by the cost unit gives the cost of each class in the department as follows: Deposited by individuals, clearing-house items, \$95; runners' items, \$126; extra cost of handling clearing-house items, \$95; out-of-town cash items, \$201. Deposited by banks, clearing-house items, \$94; run-

ners' items, \$87; extra cost of handling clearing-house items, \$94; out-of-town cash items, \$196; total, \$988.

"It will be noticed that the cost of the clearing-house items is made up of the cost of the first handling and the second handling. The analysis of the runners' department will give the cost of handling the runners' items in that department. The analysis of the transit department will give the cost of handling the out-of-town items in that department. As an illustration, the cost of out-of-town items deposited by individuals will be taken not only for the first cost, but for the several costs making up the total expense. Suppose the cost in the transit department is \$538. As the cost in the receiving department is \$201, the total cost is \$739, or \$0.00651 per item.

"Second Cost.—To get the cost per item in this class divide the total number of items of all classes handled during the month into the total of the following expenses: Salaries of officials and clerks who do not directly handle the items, which will include salaries of the audit department, messengers, porters, day and night watchmen, stenographers, telegraph clerk and filing clerk, rental value of the executive offices, lobby, stenographers' and audit departments, letter files, lockers and stationery closets, rental value of adding, listing machines and typewriters; luncheons, light, heat, premium on surety bonds, telegrams, expressage, sundries and stationery used by officials and clerks who do not directly handle the items.

"Suppose the cost per item to be \$0.006309.

"Third Cost.—Clearing-house expenses should be apportioned to checks and drafts paid and charged to each account and to city items only. To get the cost per item, divide the clearing-house expenses by the number of city cash and time items, and checks and drafts paid and charged to each account.

"There is no expense for out-of-town items in the third cost.

"Fourth Cost.—From the amount of postage properly chargeable to administration expenses, deduct the amount used by the city collection and runners' departments in mailing notices concerning notes and drafts, which should be added to the cost of city collections and runners' items. Into the net amount of postage divide the number of out-of-town

collections and out-of-town cash items handled. The result will be the cost per item for postage in these respective classes.

"Suppose the cost of out-of-town cash items to be \$0.003049 per item.

"Fifth Cost.—This embraces telephone service, including salary of operator. As the cost of out-of-town calls made for customers and correspondents is usually charged to their accounts, such part of the expense should be omitted. The remaining portion of cost of telephone service should be apportioned to city collections, city cash items and drafts and checks paid and charged to each account. Approximate the number of telephone calls made during the month in connection with city collections, runners' items and drafts and checks paid, and apportion the cost thereof to the respective classes of items. Apportion the remaining cost to city cash items. To get the cost per item, divide the number of items in the class into the cost of service.

"There is no expense for out-of-town items in the fifth cost.

"If it be determined to apportion to individual depositors alone the salaries of the clerks at the counters in the receiving and paying tellers' departments, the rental value of the lobby space used by customers and the cost of stock check-books, pass-books and deposit-tickets, there will be a cost per item for the expense.

"Suppose the cost per item to be \$0.003187.

"The five costs enumerated, and the extra cost noted above, should be brought together and the total will be the cost of handling each item in each class.

"Illustration: Cost of out-of-town items deposited by individuals:

First cost	\$0.006510
Second cost	0.006309
Third cost	0.
Fourth cost	0.003049
Fifth cost	0.
Extra cost	0.003187
Total cost per item.....	\$0.019055

"To find the cost of an account for the month, multiply the number of items in each class handled by the proper cost unit and bring together. The total is the cost of administration for the account.

"It is but fair to assume that most accounts deposit, on the average, about the same number of items every month, and for this reason it is not necessary to ascertain the administration expenses oftener than once every year or two. If there be a change in the character of the account, the analysis department should make a recount of the number of items handled. The same method can be used (with modifications, of course) by State banks and trust companies. In the case of trust companies, however, the analysis would apply to the banking department only.

"While at first it may seem difficult to make an analysis on the lines outlined, it will be found upon examination that the procedure is not involved and will be very interesting and the results obtained of great importance to any bank, as the worth of each account will be definitely known."

Note—Mr. Buckley's paper has, in substance, appeared in the *Banking Law Journal* and *Journal of American Bankers Association*. Printed here by courtesy of the author. Mr. Ensell's matter revised and arranged by himself.—W. H. K., Jr.

CHAPTER XVII.

FOREIGN AND DOMESTIC EXCHANGE

It would be quite impossible in the scope of this work to deal extensively or adequately with the subject of foreign exchange. Therefore, but a brief resumé of the subject can be undertaken, covering (a) the origin of foreign exchange; (b) the instruments; and (c) the general principles of foreign exchange transactions.

In an opening chapter it was said that trade is merely the exchange of commodities for commodities. This is true both in domestic and foreign affairs. One section sells another section, and one country another. The South sells New England cotton and buys manufactured goods. The West sells the East meat, fruits and grain, and buys all sorts of manufactured goods.

Likewise in the affairs between nations. France sells the United States silks, jewels, wines, etc.; England, the product of her mills; Germany, dyestuffs, toys and articles peculiar to German manufacture. All three nations take in exchange wheat, cotton, meats, raw material of various kinds, metals, and manufactured goods. But inasmuch as the amounts traded in do not balance, one country buying more than it sells, there is a difference arising that must be settled in money. If the merchants of England bought of the merchants of the United States, and the American merchants bought of English houses an equal amount of goods, the merchants of England could pay one another and the merchants of America likewise, and there need be only a transfer of debts to affect the balance; such a course obtains only in a limited sense and by a complicated process, but the principle is easily understood.

SETTLING DEBTS WITHOUT MONEY

The method by which debts are settled by offsetting one against the other is simple. If two men owe each other certain amounts, instead of each paying the other what is due, they meet and adjust the difference; they have "cleared"

their debts and settled the balance. Likewise several men may settle their differences by a few payments in cash. Debts are settled by mutual cancellations.

To illustrate how an international debt is cancelled without the use of money, take a simple proposition. Let us suppose that a New York merchant sells to an English mer-

1

(Exchange for) Philadelphia, Pa.
 Apr 20 1914

At Sight after date of this ~~first~~

of Exchange (Second unpaid) pay to the Order of -
 George Brown & Co.

One hundred pounds sterling

Value received and charge the same to account of
 To Johnson Bros & Co
 London England L. V. Johnson & Co.

2

(Exchange for) Philadelphia, Pa.
 Apr 20 1914

At Sight after date of this ~~second~~

of Exchange (First unpaid) pay to the Order of -
 Geo Brown & Co.

One hundred pounds sterling

Value received and charge the same to account of
 To Johnson Bros & Co.
 London England L. V. Johnson & Co.

FIG. 7.

BILL OF EXCHANGE (IN DUPLICATE)

chant \$1,000 worth of goods. An English merchant has sold a New York merchant a bill of goods likewise amounting to \$1,000. Payment for these debts might be made by the Englishman sending gold to New York, and likewise New York sending gold to England. But why this double trip across the Atlantic? Why not let the merchants in New York settle with each other, and the English merchants settle with each other and effect the same result? Therefore, the first mentioned New York merchant draws an order on

his English debtor and takes it to the other New York merchant, who is in debt to an Englishman. The debtor merchant pays the creditor merchant on this side. The bill is sent to the creditor merchant on the other side who collects from the debtor merchant there, and both transactions are closed. Thus, the two debts have been paid without shipping the coin. Upon this simple principle of offsetting debt against debt depends all exchange operations, foreign and domestic. Of course, direct dealing does not so obtain, but through the medium of banks and foreign exchange houses, essentially the same process takes place; the instruments in one country being gathered and sent to the other for collection and credit, whatever balance remains being adjusted from time to time in gold.

ORIGIN OF FOREIGN DEBTS

Debts created abroad arise from three main sources: (a) Goods purchased abroad; (b) insurance and freights paid by American merchants to foreign houses. England being the great insurance and carrier nation of the world, the freights carried in English vessels are one of the principal items in the balance against us; (c) securities held abroad upon which interest must be paid (also maturing securities or those sold by foreign holders): (d) travelers' expenses while abroad, which are enormous.

The "balance of trade" is the net amount due to or from another country, and depends upon the volume of trading one country does with another. The nation that buys more than it sells—owes more than it has due to it—is the debtor nation, and the trade balance is against it, and must settle in money at the will of the creditor.

The sources of foreign exchange are: (1) Merchandise shipped abroad against which drafts are drawn and sold in the exchange market; (2) securities sold, the seller drawing on the buyer; (3) foreign money loaned in this market, the operation consisting of drawing drafts on the lender; (4) finance bills, arising from the banker abroad allowing a banker here to draw on him, the drafts being sold and proceeds used in financial transactions until the draft is due.¹

¹Elements of Foreign Exchange—Escher.

Whenever a consignment of merchandise goes abroad, as a rule, a draft is drawn on the buyer by the seller, and sold in the market, the seller coming into immediate possession

Guaranty Trust Company of New York
Circular Letter of Credit

No. 0000 \$1,000.00

New York, December 28, 1915

Gentlemen,

We beg to introduce to you and to recommend to your courtesies
J. Lee Doe in whose favor
we have opened a credit of One Thousand
Dollars to C. Curran, and whose drafts to the order of the
Guaranty Trust Company
are payable shall meet with instant cash payment on Dec. 31, 1915.
The amount of cash advanced is noted on this letter, and your
negotiation of the drafts will be guaranteed that the required
endorsements have been made.

You will please draw drafts payable to the order of the Guaranty Trust Company, to be marked as "Drawn
against the Guaranty Trust Company's Letter of Credit No. 0000".
This letter must be attached to the last draft drawn.

We remain, Dear Sirs,
Yours faithfully,

Signature of *J. Lee Doe*

SPECIMEN

To Messieurs Our Correspondents

LETTER OF CREDIT

of his money. The trade movements, therefore, regulate the number and volume of these bills, since they are as voluminous as commerce is brisk or dull. When ocean transit operations are at a practical standstill, as obtained during the

early part of the present war, no bills arise, for no goods move, and rates are, therefore, high.

Large stocks of bonds and securities are held abroad, the European nations being large investors in American securities. When a transaction is consummated, the securities are forwarded and draft attached. And the movements of security holdings, therefore, affect the supply of bills.

In making loans, bankers do not send the cash, but allow their correspondents to draw on them. Thus, if an English bank were to lend a million dollars in this market, it would authorize its representative to draw on it, and these drafts are sold and the proceeds used as agreed upon. Take an actual case. A wholesale house desires a loan, say, of \$50,000. It deposits with its New York banker security in the form of its bills receivable, and the banker draws his draft on the English house, sells it and turns the proceeds over to the borrower. When rates abroad are low, this may be a profitable form of borrowing. If money rates are high in New York, the foreign bankers may allow their correspondent to draw on them for money to loan out for joint account, and this gives rise to what is called "finance bills."

THE DEMAND FOR BILLS

The demand for instruments of exchange arises from the following sources: (a) The payment for imports; (b) payment for securities purchased by us in Europe; (c) remittances on account of interest and dividends on stocks and bonds held abroad; (d) remittances for freight and insurance due to foreign companies; (e) tourists' expenditures; (f) payment for short-time and other loans that are maturing.

The most important item is the payment for merchandise purchased abroad. As each shipment is paid for by drawing a bill of exchange, these instruments come into the market in large numbers and for large amounts, and are a source of constant supply of bills.

As interest is due and dividends are declared, holders abroad must be placed in funds, and, therefore, a demand arises for a bill for the purpose of remitting. Likewise purchases of securities. Whenever these are purchased abroad,

whether our own or foreign issues, a demand arises for a bill of exchange with which to make payment.

Many of the large insurance companies are foreign corporations, doing business in this country amounting to mil-

Credit No. 343
\$1,000* U.S.C

Guaranty Trust Company of New York

Foreign Department

New York DEC 28 1914 191

John Brown
Yokohama

Gentlemen:

We hereby authorize you to value on Guaranty Trust Company of New York, New York, for account of James Smith, New York up to an aggregate amount of One thousand (\$1,000*) United States Currency available by your drafts at 90 (ninety) days sight against shipment of Wides from Yokohama to New York Insurance including war risk effected in New York

Bills of Lading for such shipments must be made out to the order of the Guaranty Trust Company of New York, unless otherwise specified in this credit.

CONSULAR INVOICE AND ONE BILL OF LADING MUST BE SENT BY THE BANK OR BANKER NEGOTIATING DRAFTS DIRECT TO GUARANTY TRUST COMPANY OF NEW YORK, NEW YORK

The remaining documents must accompany the drafts drawn on Guaranty Trust Company of New York, New York.

The amount of each draft, negotiated, together with date of negotiation, must be endorsed on back hereof.

We hereby agree with bona fide holders that all drafts drawn by virtue of this Credit and in accordance with the above stipulated terms shall meet with due honor upon presentation at the Office of Guaranty Trust Company of New York, New York, if drawn and negotiated prior to February 15th 1915

Guaranty Trust Company of New York,

signed Max May - v. & Co.
signed R. Lawson - e. mgr.

N. B. Drafts drawn under this Credit must state that they are "drawn under Letter of Credit No. 343"
 Dated _____

ADVICE OF LETTER OF CREDIT

lions yearly. The premiums must be remitted to the home office, and hence a demand for bills arises.

FORMS OF BILLS

The following are the principal forms of bills: (a) Commercial long bills—bills drawn by merchants upon buyers abroad, through bankers, at thirty, sixty or ninety days'

sight. If drafts accompany, they are "documentary bills"; if not, they are "clean."

Thus, a cotton merchant in Texas sells a consignment of cotton to a Liverpool merchant, under arrangement that the Texas merchant is to draw on a Liverpool bank at sixty days. The Texas merchant receives a bill of lading from the railroad company which is a "through bill," and takes the cotton into the steamer. Draft is drawn and the bill of lading attached. Insurance is also effected and other documents, such as inspection certificate, weighing certificate, etc., attached, completing the papers. The draft will be taken to the Texas bank, credited to the depositor, and sent to New York for sale in the exchange market.

Let us suppose the rate is 4.86, and the draft is for £1,000. The Texas bank will have credit for \$4,860. The New York bank may charge a commission for buying the draft, or make allowance in the price; but it gets its profit. The bill is sent by the first steamer to the bank drawn on for acceptance. If the documents are to be released upon acceptance, such will be the case; if only upon payment, the draft will have to be paid before documents are delivered. As soon as the bill is accepted, it is sold and proceeds credited to the New York bank. Thus, we have an "acceptance bill," and a "payment bill."

(b) Clean bills—drawn for the purpose of transferring funds from place to place and no documents accompany; (c) drafts drawn against securities, the securities accompanying; (d) bankers' checks, which are merely bankers' orders on their foreign balances, as domestic exchange is the result of bankers' checks on their reserve balances; (e) finance bills, used in lending and borrowing operations.

· HOW EXCHANGE IS QUOTED

Foreign exchange is drawn on three principal points: London, Paris and Berlin. Drafts on London are quoted at so much a pound Sterling, and progress by 5/100 of a cent a pound. Thus, \$4.8605; \$4.8610. Drafts on Berlin are quoted at so many American cents for each four marks. Thus, 95 1/8 means that 95 1/8 cents must be paid for four marks. These quotations progress by sixteenths. Thus, 95, 95 1/16, 95 1/8, 95 3/16, etc. The custom is fixed, but

it would seem to be more reasonable to quote a mark at so many American cents; but the above process is the rule.

Drafts on Paris are quoted at so much French money for an American dollar. Thus, 5.18 1/8 means that that many francs may be bought with an American dollar. These quotations progress by 5/8 of a centime, thus: 5.18 1/8, 5.18 3/4, etc. Thus, when exchange on Paris is high a dollar will buy less francs, and when cheap, more.

THE BASIS OF EXCHANGE

The basis of exchange dealings is the mint par of exchange, which is the price of the gold unit of one country expressed in money of the other. Thus, the gold unit of England is the pound Sterling. How much is the gold in the pound Sterling as expressed in American money? \$4.8665—meaning that the latter amount of dollars and cents will buy at any United States assay office exactly as much gold as there is in the pound Sterling. And \$4.8665 is the mint par of exchange between this country and England.

This does not mean, however, that drafts are always sold at this rate, for many elements enter to affect the price of exchange. Thus, if a debt of one pound were due in London, it would cost \$4.8665 to buy the gold to settle. Then it would have to be shipped, insured, interest lost while in transit, etc., so that you might be willing to pay more than that in order to avoid the shipping of the gold. You would pay, in other words, more than the mint par to someone who had an order on some London merchant for sale. You buy the order, send it to your creditor, he presents it and gets the money and the transaction is closed.

If there were many who wanted to settle debts in London, they might bid for the bill and run the price up; if there were many bills, but few takers, the price would fall, the law of supply and demand regulating the price at which they can be bought and sold.

CAUSES THAT AFFECT EXCHANGE RATES

The causes operating to raise or lower rates are due to the following: (a) Large imports or exports which require

bills to make payment; (b) purchase by us, and sale by Europe, or vice versa, of stocks and bonds, which must be paid for; (c) maturing obligations which must be met; (d) low money rates here and high abroad, or vice versa, making a demand for bills by which to send funds for investment.

Aside from business obligations which must be settled, there is always investment funds seeking profitable employment. When money is low in New York and a drug on the market, and demand is brisk in London, banks here will have a call for exchange in order to place the funds abroad; and conversely if money rates are high here and low abroad, foreign interests will desire to place money in this market and a demand for bills will arise.

But whatever the cause, the bill finds its way into the exchange market and is bought by a bank or trust company through the foreign exchange department, and a simple illustration will suffice to show the operation of an importation of goods.

IMPORTS

Inasmuch as every shipment of merchandise in or out of the country involves a transaction in foreign exchange, the commercial credits thus arising are important. These credits are of two kinds: credits for import purposes and credits for export purposes.

Let us assume that a merchant in New York dealing in Japanese ware has arranged a purchase with a merchant in Japan, either by cable, by mail, or by representative. Having made the arrangements as to terms, the merchant goes to his banker and arranges to finance the operation. He places full details before the banker, who issues a letter of credit. The letter of credit will contain information as to terms, time to run, articles to be shipped, insurance, etc., and will authorize the shipper to draw on some London bank which will accept the draft when presented.

Inasmuch as the business of financing the foreign trade of the world is largely done through London, the credit will be arranged through a London bank. This business is the outgrowth of years of world-wide dealings and London banks are known the world over. They have established reputations and banking connections in every part of the

globe. London is not only the money center of the world, but the world's great trading center. To it comes trade from all the world, and by virtue of its place in the world's financial affairs, London has become the clearing-house for the world's transactions, and a London acceptance will be good anywhere.

The merchant in New York, therefore, arranges with his bank for a London acceptance, giving security or not,

TRUST RECEIPT.

Received from THE GUARANTY TRUST CO. OF NEW YORK the following goods and merchandise, their property, specified in the Bill of Lading per S. S. _____

Dated _____ marked and numbered as follows:

and, in consideration thereof, $\left\{ \frac{1}{we} \right\}$ HEREBY AGREE TO HOLD SAID GOODS IN TRUST for them, and as their property, with liberty to sell the same for their account, and further agree, in case of sale to hand the proceeds to them to apply against the acceptances of THE GUARANTY TRUST CO. OF NEW YORK on $\left\{ \frac{my}{our} \right\}$ account, under the terms of the Letter of Credit No. _____ issued for $\left\{ \frac{my}{our} \right\}$ account and for the payment of any other indebtedness of $\left\{ \begin{smallmatrix} mine \\ ours \end{smallmatrix} \right\}$ to THE GUARANTY TRUST CO. OF NEW YORK.

THE GUARANTY TRUST CO. OF NEW YORK may at any time cancel this trust and take possession of said goods, or of the proceeds of such of the same as may then have been sold, wherever the said goods or proceeds may then be found and in the event of any suspension, or failure, or assignment for the benefit of creditors, on $\left\{ \frac{my}{our} \right\}$ part, or of the non-fulfillment of any obligation, or of the non-payment at maturity of any acceptance made by $\left\{ \begin{smallmatrix} me \\ us \end{smallmatrix} \right\}$ under said credit, or under any other credit issued by THE GUARANTY TRUST CO. OF NEW YORK on $\left\{ \frac{my}{our} \right\}$ account or of any indebtedness on $\left\{ \frac{my}{our} \right\}$ part to them, all obligations, acceptances, indebtedness and liabilities whatsoever shall thereupon (with or without notice) mature and become due and payable. The said goods while in $\left\{ \frac{my}{our} \right\}$ hands shall be fully insured against loss by fire.

Dated, New York City, _____ 19

(Signed) _____

£ _____ Stg.

as his credit may require. The London bank will be advised of the open credit, and the letter of credit will be sent to the Japanese merchant as authority to draw on the London bank. The shipper draws the draft, attaches insurance certificate and bill of lading, which is so worded as to make the merchandise deliverable only to the banker's order in New York. This is his protection. The letter of credit is sent in duplicate to the London bank for its guidance when the draft is presented.

The draft with bill of lading, certificates, etc., attached form one complete set of papers. The Japanese merchant is now in position to sell his draft, for it will be accepted in London, and his local bank will buy it from him at current rates.

The merchandise is en route to New York, and the papers on their way to London. When the papers are presented to the London bank they will be compared with the duplicates sent in advance from New York, and if proper in form, the draft will be accepted and returned to the presenting bank, which will sell it in the money market, and credit proceeds to its Japan correspondent. The papers in the transaction are then forwarded to New York, arriving before the merchandise, as a rule.

The goods arriving in New York are at the disposal of the merchant, but stand in the name of the bank and cannot be had until the bill of lading is presented, properly endorsed, to the carrier. The banker, however, wants some assurance of getting the money he will have to advance to London to meet the acceptance when due, as agreed when the credit was opened.

He, therefore, surrenders the bill of lading, and in its place takes a "trust receipt," which in substance agrees that the title to the goods is to remain in the bank, and proceeds when collected are to be delivered to the bank. The bank also reserves the right upon due cause to cancel the trust, and take possession of the goods or their proceeds wherever they may be found.

The term of credit being about to expire, it becomes needful that the bank in New York be placed in funds to meet the acceptance which is coming due in London. Several days prior to the maturity of the acceptance, the New York bank will present its memorandum to the buyer, with

request for funds to meet the London acceptance; and presuming the terms to have been four months, the buyer has had that time in which to turn the goods into money.

The buyer pays the banker the amount necessary to purchase a draft on London, and from the amount so received the bank will buy a draft on London payable on demand, and forward to London in time to meet the acceptance. The operation is then closed. No money has been put up except in the London money market. The bank in New York advanced none; the buyer had four months to turn his sales; from the sales he paid the bank, and from the amount so paid the bank purchased an instrument to cancel the debt due in London; and so without money, but using only credit and banking machinery, an international transaction has been carried through. The New York bank received a commission for its services; the London bank for its acceptance, and the transaction is satisfactory to all.

The purchaser gets his money from the sale of goods; the banker gets his money from the buyer here; the London bank from the New York banker; but where does the money come from for the seller? From his bank. But where does that bank get its funds? It does not get funds, but a credit in London, against which it sells its bankers' draft.

When the draft went to London, the proceeds were credited to the Japanese bank, and against the credit so established, it could draw its bankers' time or demand drafts, for cash deposited with it. The only one actually out of funds during the period of credit was the bank or individual buying the draft in London, the proceeds of which were placed to the credit of the bank in Japan. These are the essential elements of foreign exchange, elementary and easily understood, but complex and often confusing in their detailed operations.

EXPORTS

In selling a consignment of goods abroad the reverse process obtains, as was illustrated in the case of the Texas merchant above. The buyer here draws on London and sells the draft to an American bank, which will forward as did the Japanese bank to London for acceptance. In exports it is necessary to have the documents complete so that the bill

will be accepted upon arrival. These are: (a) The bill itself, properly drawn in duplicate; (b) the bill of lading, sometimes issued at the place of origin and which carries the consignment through from the railroad to the steamer and to the foreign port; (c) the insurance papers; and if grain or cotton (d) an inspection certificate. With these in hand the bill is readily salable in the foreign exchange market at the current rates.

For a foreign exchange transaction, it becomes important to know: (a) That the bill of lading is genuine and the goods in transit; and this is now assured by virtue of the frauds that have been perpetrated in this line, and from which have resulted better and more careful methods as to safeguarding the issue of bills of lading; (b) that the drawee is responsible and will accept when the papers are presented, and that this acceptance will be equivalent to payment; (c) the class of goods. If they are staple, they may be sold even though the transaction is not consummated; but if otherwise trouble may be experienced in turning the goods into money; and lastly, the character of the bill of exchange—whether it is one that releases the documents upon acceptance or only upon payment.

FACTORS IN FOREIGN EXCHANGE

There are many factors to be considered in buying exchange. Not only does the quoted rates indicate the market, but the time of the bill and the character have much to do with the rate. If the draft is drawn for a long time—thirty, sixty or ninety days—the acceptor, upon paying the draft before maturity, is entitled to a rebate for the unexpired term. This rate of discount varies according to the official rate of the Government banks. In England a “payment bill” is rebated at one-half per cent. above the advertised rate of interest paid by the joint stock banks on short-time deposits. If the rate is three and one-half per cent. the rebate rate will be four per cent. on English payment bills. There are also the taxes and other bank charges.

Bills are usually drawn in sets of two and sometimes three. The reason for this came about through the perils of the sea. When in olden days a bill was drawn, it was drawn in duplicate or triplicate, and each one sent by a different

or the various calculations in the exchange operations; sufficient here to give the fundamental principles.

The greatest danger in handling foreign exchange, as well as any loan secured by merchandise in transit, is the forged bill of lading, and all that has been said regarding the authenticity of these documents elsewhere here applies; for if the bill of lading be a forgery (and such are easy to obtain) the security rests entirely upon the drawer's credit, and if the bill is forged it is more than likely that the transaction is bogus.

A finance bill has been defined as "a long draft drawn by a banker in one country on a banker in another, sometimes secured by collateral, but more often not, and issued by the drawing banker for the purpose of raising money."² The origin of these finance bills is an agreement made between two bankers by which one agrees to allow the other to draw on him up to a certain amount, and to accept the bills as presented, for a commission. The drawer's credit must, of course, be good with the accepting bank, or collateral deposited, which would defeat the purpose of the arrangement, i. e., the raising of money on mere credit.

If the drawing banker can sell his drafts at a high figure and when the acceptance is due, pay by buying a demand draft at a cheaper rate, he has made a double profit; but if the market is higher, he will lose part of his profits made by lending the proceeds of the first draft. It is a speculation in exchange.

There is a vast amount of foreign money loaned out in this market. Interest rates here are usually higher than abroad, where capital has accumulated for centuries, and where there is usually a surplus, it being estimated that France yearly invests nearly a billion dollars in outside securities.

Suppose a foreign banker decides to loan in this market. He may go "joint account" with an American bank, or loan independently through the latter. The loan is negotiated with the borrower and the banker will draw a draft for the amount to be loaned, say, £10,000, and hand to the borrower who will sell it in the market. When payment is due in London, the borrower must have in hand a demand bill for the amount due. To illustrate: Suppose a London

²Escher, *Elements of Foreign Exchange*.

bank arranges to loan in New York £100,000. The New York bank draws a £100,000 bill at ninety days' sight, and turns over to a brokerage house, which has deposited satisfactory security. The firm sells the draft for \$485,000. The bill goes to London and is accepted by the London bank, and sold in the market. In ninety days the bill will be due, and the New York bank will ask the borrower to send a demand draft for the £100,000 plus a commission. This bill will arrive in London a few days before the first draft is due and take it up.

The profits depend upon the state of the market. In the first place, upon the amount the borrower realized from the sale of the first draft; in the second place, what the demand draft cost, and in the third, the commissions. If exchange was high when the loan was made and low when it matured, the borrower has profited; if low when the loan was made and high when it matured, he has lost.

If the loan had been for dollars, the bank would have turned over the proceeds of the draft first drawn, and not the draft itself. At the end of the time the firm would pay the loan in dollars plus interest and commissions, and the bank would invest the proceeds in a draft to be sent over to pay the loan when due. It is evident that the lender puts up no money, but simply allows his credit to be drawn against. The loan money will come from the open market, and the maturity met by the borrower on this side, and the banker has made a distinct profit from the use of his credit. The London bank must, of course, be in position to meet its acceptance. The profit to both banks concerned in the loan is the commission for the services.

PROFITS IN FOREIGN EXCHANGE

After the banker has ascertained what the rate of discount will be for bills due to arrive by a certain steamer, he is in position to buy bills here and send them over for discount and credit. On the balance thus created, he will draw his banker's drafts. If from selling his demand drafts he realizes more than the time drafts cost him, he is that much the gainer. To illustrate: A banker has bought, say, a £1,000 ninety days' sight prime draft on London, documents deliverable on acceptance. This he has remitted to

his foreign correspondent, and the latter has had it stamped with the required "bill stamp," had it discounted, and after having taken commissions out of the proceeds, has placed them to the credit of the American bank. In this process the bill has lost weight. It arrived in London as £1,000, but after commissions, bill stamp and ninety days' discount have been deducted, the amount is reduced well below £1,000. The net proceeds which go to make up the balance on which the American banker can draw his drafts are perhaps not over £990. He paid so many dollars originally for the draft. If he can realize that many dollars by selling his demand drafts, he is even on the transaction; if more, it is to his profit; if less, he loses.³

ARBITRAGE

Arbitrage is the dealing in foreign exchange through a third city rather than direct. For instance: A banker in New York desires to make a remittance to Paris. He finds that he can remit from London cheaper than direct from New York. He draws his draft on Paris and sells it. With the proceeds he buys a draft on London. He instructs his London banker to buy a draft on Paris for him and send it for his account. If the market is favorable for such an operation there may be a distinct profit over remitting direct. It can readily be understood that such operations require a keen insight into the market and careful calculations so that profit results, and all sorts of combinations are possible. But banks as banks do not deal in such matters extensively, it being the function of specialists in foreign exchange to carry through such operations. The average banker simply buys and sells drafts on balances abroad, either directly or indirectly, but most generally the latter, through large city banks.

CABLES

A cable transfer is essentially the same as a telegraphic transfer of money. The banker on this side, upon receipt of the money, will cable the bank abroad to pay a certain amount to the party designated. This necessitates, of course,

³From Elements of Foreign Exchange—Escher.

Guaranty Trust Company of New York

FOREIGN DEPARTMENT

COLLECTIONS

No.	Date	Orig. No.																											
For account of																													
Payable in		Amount																											
Issued	Term	Accepted Due																											
Drawer		Drawee																											
<table border="1"> <tr> <td>Acceptance and return to fgn.</td> <td rowspan="10">Rate Exchange</td> <td></td> </tr> <tr> <td>Documents on acceptance</td> <td>\$</td> </tr> <tr> <td>Documents on payment</td> <td></td> </tr> <tr> <td>Bills of lading</td> <td></td> </tr> <tr> <td>Consular invoice</td> <td></td> </tr> <tr> <td>Invoice</td> <td></td> </tr> <tr> <td>Insurance certificate</td> <td></td> </tr> <tr> <td>Certificate of inspection</td> <td>\$</td> </tr> <tr> <td>Declaration of shipper</td> <td></td> </tr> <tr> <td>No protest</td> <td></td> </tr> <tr> <td>No protest for non-acceptance</td> <td></td> </tr> <tr> <td>Hold for arrival of goods</td> <td></td> </tr> <tr> <td>Posted owner's book</td> <td></td> </tr> </table>			Acceptance and return to fgn.	Rate Exchange		Documents on acceptance	\$	Documents on payment		Bills of lading		Consular invoice		Invoice		Insurance certificate		Certificate of inspection	\$	Declaration of shipper		No protest		No protest for non-acceptance		Hold for arrival of goods		Posted owner's book	
Acceptance and return to fgn.	Rate Exchange																												
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COLLECTIONS, FOREIGN EXCHANGE TRANSACTIONS

carrying a balance abroad, as the transfer of money by telegraph necessitates a supply of cash by the one advised to pay on the other end.

The foreign exchange market has no clearing-house—no “Exchange”—the market being very broad and “open.” It is composed of banks and exchange houses operating independently, and all working as separate units.

There being no exchange and no public place where offerings are made and accepted, the market is established by the money rates abroad and the demand and supply of bills.

'Travellers' letters of credit are documents issued by banks and foreign exchange houses in which it is agreed that the issuing bank will pay up to a certain amount, and authorizing foreign correspondents to make advances on the letter as the owner requires. As the journey progresses, bank after bank will advance various amounts, endorsing the fact on the back, until the credit is exhausted. As advances are made the issuing bank is notified and remits its banker's draft or settles by reciprocal account.

DOMESTIC EXCHANGE

One of the profitable functions of a bank is to furnish exchange, both foreign and domestic. By this is meant the furnishing of drafts and letters of credit on other points, foreign and domestic. Domestic exchange is exceedingly simple, the unit being the dollar, and computations in other forms of money are, therefore, not necessary. It is not an arithmetical process.

The bank maintains an account in New York, Chicago or other large city. It will sell its orders on these places at a certain rate of exchange. As individuals keep bank accounts, so banks keep accounts; and as the individual might ask a fee for drawing a check, so the bank charges a fee. It is cheaper than to ship the money by express and the exchange rate is based theoretically on the cost of shipping money. If the rate is greater than the actual express cost, of course the latter method would be used; but if less, the banker's check will be used.

By virtue of the fact that checks on certain cities are received at par, it is desirable that merchants remit in such funds as a courtesy to their creditors, and is a right which the latter may insist upon. And as a personal check would cost the creditor the collection charges, therefore, the draft is not only just, but cheapest and is often requested. Not only are these drafts sold, but are used to settle debts, bank to bank. They are merely checks of one bank drawn on another.

Some banks as a courtesy to large depositors give out these domestic drafts without charge. For instance: A large firm will have several out-of-town bills to settle. It will draw a check on its bank to cover the lot and send to

DRAFTS DRAWN ON

Date	TO WHOSE ORDER	Number	Amount	When Paid	Total	Exchange	Total Exchange	TO WHOM SOLD
	<i>Amount Brought forward,</i>	50						
		51						
		52						
		53						
		54						
		55						
		56						
		57						
		58						

DRAFT REGISTER

the latter with notation on the back to whose order drafts are to be drawn. The bank will draw several drafts in the various amounts in return for the one check, which the merchant will send with his remittance letters. The cost to him is nothing, but to the bank, theoretically, the cost is the expense of placing funds in the New York bank to meet the drafts; but as these funds are created by sending other items drawn on New York, this cost is small.

Some banks use a draft book similar to the ordinary check book with stubs; while others have the drafts made in pads, numbered, and account is kept of drafts issued on a "draft register," giving the name, date, amount, and draft number.

The receiving teller taking in cash for a draft will make out a requisition for draft, and the paying teller exchanging a draft for the maker's check, will make a like requisition, in order to balance his accounts at the end of the day.

The total drafts issued each day are credited to the banks drawn on, by passing credit tickets taken from the register in total for each bank. Exchange collected from this process is, of course, credited to exchange account. The accounts are reconciled as are the individual accounts of a bank with its own customers. Some banks notify the correspondent of all drafts drawn, and others of those over a certain amount. One bank in New York at one time featured the opening of accounts upon which drafts could be drawn only in sums of \$200 and less, the agreement being that larger drafts would not be drawn, nor would such be honored without communicating with the drawer. It was a clever safeguard against possible forgeries.

APPENDIX

RULINGS OF THE FEDERAL RESERVE BOARD

COMMERCIAL PAPER

November 10, 1914.

The Federal Reserve Board, under section 13 of the Federal Reserve Act, has the right to determine or define the character of paper eligible for discount, to wit, "notes, drafts, and bills of exchange arising out of actual commercial transactions; that is, notes, drafts, and bills of exchange issued or drawn for agricultural, industrial or commercial purposes, or the proceeds of which have been used or are to be used for such purposes."

Bearing in mind the requirements of the present situation, the Federal Reserve Board believes that it would be inadvisable at this time to issue regulations placing a narrow or restricted interpretation upon the section defining the character of paper eligible for discount. It has, therefore, been decided not at this time to enter upon the discussion of the question of single or double-name paper, but to admit both forms of bills to rediscount with the Federal Reserve Banks.

The Federal Reserve Board proposes, however, to prescribe the following basic principles for the guidance of Federal Reserve Banks and member banks:

BASIC PRINCIPLES

(a) No bill shall be admitted to rediscount by Federal Reserve Banks the proceeds of which have been or are to be applied to permanent investment, and Regulation No. 2 has been formulated with the intention of giving effect to this principle, and is herewith inclosed.

(b) Maturities of discounted bills should be well distributed. It is the well-established practice of European reserve banks to invest only in obligations maturing within a short time. It is a general rule not to purchase paper having more than ninety days to run. The maturities of these notes and bills are so well distributed as to enable those banks within a short time to strengthen their hold on the general money market by collecting at maturity or by reinvesting at a higher rate a very substantial proportion of their assets.

Acting on this principle, the Federal Reserve Banks should be in position to liquidate, whenever such a course is necessary, substantially one-third of all their investments within a period of 30 days. Departure from this principle will endanger the safety of the system. It is observance of this principle that affords justification for permitting member banks to count balances with Federal Reserve Banks as the equivalent of cash reserves.

(c) Bills should be essentially self-liquidating.

Safety requires not only that bills¹ held by the Federal Reserve Banks should be of short and well distributed maturities, but, in addition, should be of such character that it is reasonably certain that they can be collected when they mature. They ought to be essentially "self-liquidating," or, in other words, should represent in every case some distinct step or stage in the productive or distributive process—the progression of goods from producer to consumer. The more nearly these steps approach the final consumer the smaller will be the amount involved in each transaction as represented by the bill, and the more automatically self-liquidating will be its character.

Double-name paper drawn on a purchaser against an actual sale of goods affords, from the economic point of view, *prima facie* evidence of the character of the transaction from which it arose. Single-name notes, now so freely used in the United States, may represent the same kind of transactions as those bearing two names. Inasmuch, however, as the single-name paper does not show on its face the character of the transaction out of which it arose—an admitted weakness of this form of paper—it is incumbent upon each Federal Reserve Bank to insist that the character of the business and the general status of the concern supplying such paper should be carefully examined in order that the discounting bank may be certain that no such single-named paper has been issued for purposes excluded by the act, such as investments of a permanent or speculative nature. Only careful inquiry on these points will render it safe and proper for a Federal Reserve Bank to consider such paper a "self-liquidating" investment at maturity.

PROCEDURE

Turning now to the question of procedure, it is not thought necessary to impose upon the banks the observance of methods which would involve needless difficulty or delay. It is, therefore, not deemed essential that a statement of condition be attached to each bill when sold to a Federal Reserve Bank.

It is, however, thought advisable by the board to require that on and after January 15, 1915,² no paper shall be discounted or purchased by Federal Reserve Banks that does not bear on its face the evidence that it is eligible for rediscount under the principles and definitions above outlined and as expressed in Regulation No. 2, and that the seller of the paper has given a statement to the member bank. A rubber stamp stating, in substance:

Eligible for Rediscount with
FEDERAL RESERVE BANKS
under regulations of
Federal Reserve Board Circular No. 13
CREDIT FILE No. ———
DISTRICT No. ———
(Name of Member Bank)

is considered sufficient evidence to that effect at this time. It would be

¹For brevity's sake, the words "bills" and "notes" whenever used in these paragraphs include bills, notes and drafts, as specified in the act.

²This date has been indefinitely postponed.

understood that the Federal Reserve Bank could at any time call for the appropriate credit file, and it may well be expected that the data thus gathered—particularly the files of more important firms and of those rediscounting in larger amounts—will be so catalogued as to furnish the nucleus of an effective credit bureau which, in turn, may eventually develop into a central credit bureau for the benefit of all the Federal Reserve Banks of the system.

THE STATEMENT

For the time being certified accountant's statements will not be required. This matter is reserved for regulation at a later date. The required statement as outlined above should be signed under oath and should contain a short general description of the character of the business, the balance sheet, and the profit and loss account. Assets should be divided into permanent or fixed investments, slow assets, and quick assets.

On the liability side should be shown capital, long-term loans, and short-term loans. Short-term loans should be in proper proportion to quick assets, and the statement should contain satisfactory evidence that short-term paper is not being sold against permanent or slow investments. The statement should, furthermore, show the maximum aggregate amount up to which the concern supplying this paper expects to borrow on short credit or sale of its paper, and the concern giving the statement should obligate itself to obtain the member bank's consent before exceeding the agreed limit.

The affixing of the stamp stating such paper to be eligible for rediscount will be considered a solemn and binding declaration by the member bank that the statement has been examined from this point of view, and that the paper bought complies with all the requirements of the law and the regulations hereby imposed.

The board appends two additional regulations: No. 3, covering discount transactions on or before January 15; No. 4, discount operations on or after January 15.

Six-Months' Paper—The law provides that the Federal Reserve Board shall fix the percentage of its capital (by which is understood that portion of the capital paid in) up to which a Federal Reserve Bank may discount "notes, drafts and bills drawn or issued for agricultural purposes, or based on live stock, and having a maturity not exceeding six months." The law permits the Federal Reserve Board to deal with each Federal Reserve Bank individually in fixing this limit.

The Federal Reserve Board has determined to fix this limit generally, and until further notice, at twenty-five per cent. of the capital that shall have been paid in from time to time. For those districts in which, during certain seasons, six-months' paper is particularly required to carry through agricultural operations the limit will be increased from time to time upon requests made by Federal Reserve Banks to the Federal Reserve Board.

REGULATIONS AS PER RULING OF THE FEDERAL RESERVE BOARD

REGULATION No. 2

That part of Section 13 of the Federal Reserve Act which relates to rediscount operations of Federal Reserve Banks reads as follows:

Upon the indorsement of any of its member banks, with a waiver of demand, notice and protest by such bank, any Federal Reserve Bank may discount notes, drafts, and bills of exchange arising out of actual commercial transactions; that is, notes, drafts, and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes or the proceeds of which have been used, or are to be used, for such purposes, the Federal Reserve Board to have the right to determine or define the character of the paper thus eligible for discount, within the meaning of this act. Nothing in this act contained shall be construed to prohibit such notes, drafts and bills of exchange, secured by staple agricultural products, or other goods, wares, or merchandise from being eligible for such discount; but such definition shall not include notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of Government of the United States. Notes, drafts, and bills admitted to discount under the terms of this paragraph must have a maturity at the time of discount of not more than ninety days: *Provided*, That notes, drafts, and bills drawn or issued for agricultural purposes or based on live stock and having a maturity not exceeding six months may be discounted in an amount to be limited to a percentage of the capital of the Federal Reserve Bank, to be ascertained and fixed by the Federal Reserve Board.

Any Federal Reserve Bank may discount acceptances which are based on the importation or exportation of goods and which have a maturity at time of discount of not more than three months, and indorsed by at least one member bank. The amount of acceptances so discounted shall at no time exceed one-half the paid-up capital stock and surplus of the bank for which the rediscounts are made.

The aggregate of such notes and bills bearing the signature or indorsement of any one person, company, firm, or corporation rediscounted for any one bank shall at no time exceed ten per centum of the unimpaired capital and surplus of said bank; but this restriction shall not apply to the discount of bills of exchange drawn in good faith against actually existing values.

Any member bank may accept drafts or bills of exchange drawn upon it and growing out of transactions involving the importation or exportation of goods having not more than six-months' sight to run; but no bank shall accept such bills to an amount equal at any time in the aggregate to more than one-half its paid-up capital stock and surplus.

Section 19 of the Federal Reserve Act, relating to reserves, reads in part as follows:

Any Federal Reserve Bank may receive from the member banks as reserves, not exceeding one-half of each installment, eligible paper as

described in section 14 properly indorsed and acceptable to the said reserve bank.³

The announcement to be made by the Secretary of the Treasury on November 16 will bring into operation these two sections, and it is accordingly necessary that the several Federal reserve banks shall be advised of the characteristics that must be possessed by paper offered for rediscount to be acceptable under the terms of this act.

While section 13 provides that the Federal Reserve Board shall have the right to determine or define the character of the paper thus eligible for discount within the meaning of the act, the section referred to defines in general terms the elements which such paper must possess in order to be eligible.

All paper offered for discount under this section to any Federal Reserve Bank must conform to the following requirements:

First—It must be indorsed by a national or State bank or trust company which is a member of the Federal Reserve Bank to which it is offered for rediscount.

Second—Such bank must, with its indorsement, waive demand notice and protest.

Third—Paper so offered shall be in the form of notes, drafts, or bills of exchange arising out of commercial transactions; that is, notes, drafts, and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been used or are to be used for such purposes.

Fourth—If in the form of acceptances, they must be based on transactions, involving the importation or exportation of goods and must have a maturity at the time of discount of not more than three months to run. They must, furthermore, be indorsed by at least one member bank, and the total amount offered shall in no event exceed one-half the paid-up capital stock and surplus of the bank offering same.

Fifth—The aggregate of notes and bills bearing the signatures or indorsement of any one person, company, firm or corporation rediscounted for any one bank shall at no time exceed ten per cent. of the unimpaired capital and surplus of said bank; but this restriction shall not apply to the discount of bills of exchange drawn in good faith against actually existing values.

Subject to these limitations it devolves upon the Federal Reserve Board to determine or define for the several Federal Reserve Banks (1) notes, drafts, and bills of exchange eligible for rediscount; (2) bank acceptances eligible for rediscount.⁴

The limitations relating to rediscount operations, contained in section 13 of the act, may be divided into two classes: First, those positive limitations under which such notes, drafts, and bills of exchange may be

³Attention is called to the fact that the error in the original act which refers to eligible paper, referred to in section 14, has been corrected by amendment approved August 15, 1914, and this section now reads:

"Any Federal reserve bank may receive from the member banks as reserves, not exceeding one-half of each installment, eligible paper as described in *section thirteen*, properly indorsed and acceptable to the Federal reserve bank."

⁴Bank acceptances eligible for rediscount are defined in regulation No. 6.

accepted for rediscount; and, second, those limitations specifically stating what paper shall be excluded.

If we begin with the latter, we find the very clear provision excluding all notes, drafts, and bills of exchange which are "issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities (except bonds and notes of the Government of the United States)." This clause does not require comment.

The act further excludes notes, drafts, and bills of exchange covering "merely investments."

Any funds employed in agriculture, commerce, or industry are quasi-investments, and the emphasis is, therefore, to be laid on the word "merely" in this connection.

From this point of view are to be excluded all bills whose proceeds have been or are to be used in permanent or fixed investments of any kind. "Agricultural, industrial, or commercial purposes" cannot, therefore, be held to include investments in land, plant, machinery, permanent improvements, or transactions of a similar nature.

The purchase of commodities for purposes which are merely speculative and not connected with an ultimate process of manufacturing or distribution would constitute a "mere" investment, and bills covering such investments are accordingly not eligible for rediscount.

In order to be eligible for rediscount bills must "arise out of actual commercial transactions," and "proceeds must have been used or they are to be used for agricultural, industrial, or commercial purposes."

In like manner "notes, drafts, and bills of exchange secured by staple agricultural products or other goods, wares, or merchandise" are eligible for rediscount provided they arise out of "actual commercial transactions" covering some particular stage in the process of production and distribution.

They are not eligible when drawn to cover merely speculative investments.

REGULATION No. 3

Whenever a member bank shall offer for rediscount any note, draft, or bill of exchange bearing the indorsement of such member bank, with waiver of demand notice and protest, the directors or executive committee of the Federal Reserve Bank may, until January 15, 1915, accept as evidence that the proceeds of such note, draft, or bill of exchange were or are to be used for agricultural, industrial, or commercial purposes (and that such notes, drafts, or bills of exchange in other respects comply with the regulations of the board) a written statement from the officer of the applying bank that of his own knowledge and belief the original loan was made for one of the purposes mentioned, and that the provisions of the act and regulations issued by the board have been complied with.⁵

REGULATION No. 4⁶

From and after January 15, 1915, all notes, drafts, or bills of ex-

⁵See Regulation B, following.

⁶Revoked January 12, 1915. See page 598.

change offered for rediscount shall show on their face, or by indorsement, a statement substantially to the following effect:

Eligible for rediscount with Federal Reserve Banks under regulations of the Federal Reserve Board Circular No. 13:

Credit File No.
 District No.
 Name of member bank

The credit file number shall refer to evidence in possession of the member bank that the proceeds of such notes, drafts, or bills of exchange, under the terms of the loans made or to be made, were, or are to be used for agricultural, industrial, or commercial purposes, as required by Section 13 of the Federal Reserve Act, and as imposed by Regulation No. 2 of the Federal Reserve Board, and such credit files shall be open to inspection by any examiner appointed by the Comptroller of the Currency or selected by the Federal Reserve Bank discounting same, and copies of such files, or any part thereof, shall be furnished to the officers of the Federal Reserve Bank upon request.

The credit files referred to should contain not only evidence of the purpose or purposes for which such loans are made, but also full and complete information as to the financial responsibility of the borrower, including a short general description of the character of the business, balance sheet, and profit and loss account of the borrower. Assets should be divided into permanent or fixed investments, slow assets, and quick assets. On the liability side should be shown capital, long-term loans and short-term loans. Short-term loans should be in proper proportion to quick assets, and the statement should contain satisfactory evidence that short-term paper is not being sold against permanent or slow investments. The statement should, furthermore, show the maximum aggregate amount up to which the concern supplying this paper expects to borrow on short credit or sale of its paper, and the individual, firm, or corporation giving the statement should obligate himself or itself to obtain the member bank's consent before exceeding the agreed limit. The affixing of the stamp stating such paper to be eligible for rediscount will be considered a solemn and binding declaration by the member bank that the statement has been examined from this point of view and that the paper bought complies with all the requirements of the law and of the regulations hereby imposed.

REGULATION No. 5

Whenever notes, drafts, or bills of exchange offered for rediscount have a maturity of more than three but less than six months, and the Federal Reserve Bank has been satisfied in the manner provided by Regulation No. 2 that the proceeds of loans applied for are used or are to be used for agricultural purposes or are based upon live stock, such notes, drafts, and bills of exchange may, until further notice, be accepted for rediscount in an aggregate amount not exceeding twenty-five per cent. of the paid-in capital of the Federal Reserve Bank accepting same.

REGULATION No. 6

Whenever bank acceptances are offered for rediscount it must appear on the face of such acceptances that the proceeds thereof were used or are to be used in connection with a transaction involving the importation or exportation of goods; that is to say, it must appear that there has been an actual bona fide sale which involves the transportation of goods from some foreign country to the United States or from the United States to some foreign country.

ACCEPTANCE OF STATEMENTS IN LIEU OF CERTIFICATES AS TO CHARACTER OF COMMERCIAL PAPER
January 12, 1915.

The necessity of giving more time before Regulation No. 3 of November 10, 1914, shall become effective is recognized by the Federal Reserve Board. The accompanying regulation is, therefore, issued as appended.

Regulation No. 4, of 1914, which was to go into effect January 15, is hereby revoked and canceled and will be replaced by a new regulation soon to be issued.

REGULATION A, SERIES OF 1915, SUPERSADING REGULATION No. 3, OF 1914

Whenever a member bank shall offer for rediscount any note, draft, or bill of exchange bearing the indorsement of such member bank, with waiver of demand notice and protest, the directors or executive committee of the Federal Reserve Bank may, until July 15, 1915, accept as evidence that the proceeds of such note, draft, or bill of exchange were or are to be used for agricultural, industrial or commercial purposes (and that such notes, drafts or bills of exchange in other respects comply with the regulations of the board) a written statement from the officer of the applying bank that of his own knowledge and belief the original loan was made for one of the purposes mentioned, and that the provisions of the act and regulations issued by the board have been complied with.

SIX MONTHS' AGRICULTURAL PAPER
January 15, 1915.

The appended regulation is issued to supersede Regulation No. 5, of November 10, 1914, which is hereby revoked and canceled.

REGULATION C, SERIES OF 1915, SUPERSADING REGULATION No. 5, OF NOV. 10, 1914

The word "bill" when used in this regulation shall be construed to include notes, drafts, or bills of exchange.

Each Federal Reserve Bank may receive for discount bills which have a maturity of more than three but less than six months, in an ag-

gregate amount equal to a percentage of its capital stock to be fixed from time to time for each Federal Reserve Bank by the Federal Reserve Board.

Provided, however, That such bills are drawn or issued for agricultural purposes or are based on live stock; that is, that their proceeds have been used or are to be used for agricultural purposes, including the breeding, raising, fattening or marketing of live stock; and

Provided further, That such bills comply in all other respects with each and every provision of Regulation B, series of 1915.

COMMERCIAL PAPER

January 25, 1915

When Circular No. 13, bearing date of November 10, 1914, and the accompanying regulations were issued it was hoped that a period of two months would suffice to enable member banks to familiarize their customers with the requirements of Regulation No. 4 of 1914. It appears, however, that in many districts the needed readjustments of banking and business practice cannot be effected in so short a period. An extension of time, was, therefore, asked by both member banks and their customers for the purpose of adjusting their methods to the new requirements and was granted by the board (see Regulation A, accompanying Circular No. 2, Series of 1915).

In order to facilitate operations, particularly during the initial period, the requirements as to borrowers' statements have been modified. But while Circular No. 13, of November 10, 1914, is now superseded, the board has not modified its views upon the general principles therein expressed as being of fundamental importance in the best development of the new system.

The board has formulated Regulation B, hereto annexed (paragraph III), a new method for certifying the eligibility of bills for rediscount. While banks will not be required to comply with the provisions of paragraph III until after July 15, the new method prescribed is made a part of this regulation in order that advance notice may be given to all banks, so that those which are equipped to do so may begin to operate under its provisions as soon as possible. The board suggests, furthermore, that Federal Reserve Banks insist that the accompanying regulation be applied as promptly as possible to all so-called "purchased paper"—that is, paper bought through brokers or others with whom the purchasing bank has no direct business relations. Where such direct connections do not exist the requirement that statements, both as to business conditions and methods of borrowing, be furnished appears to be a matter of prudence and should not be postponed. In such cases as these, where borrowers' statements in the required form are not available until after the close of the business year, statements for the previous year may be accepted, pending receipt of new statement in required form, even though such statements may not contain all the desired data.

While it has been thought best not to insist upon a written statement in the case of limited borrowings by depositors, when officers of

member banks, from their own personal knowledge, certify to the eligibility of the paper for discount, it is urged, nevertheless, that member banks do their utmost to accustom their borrowers to furnish such statements.

REGULATION B. SERIES OF 1915, SUPERSEDING REGULATIONS 2 AND 4
OF 1914

The word "bill," when used in this regulation, shall be construed to include notes, drafts, or bills of exchange, and the word "goods" shall be construed to include goods, wares, merchandise, or staple agricultural products, including live stock.

I. *Statutory Requirements*—The Federal Reserve Act provides that a bill, other than an acceptance (see Circular No. 5 and Regulation D, to be published shortly), to be eligible for rediscount by a member bank with a Federal Reserve Bank, must comply with the following statutory requirements: (a) It must be indorsed by a member bank, accompanied by a waiver of demand, notice and protest. (b) It must have a maturity at the time of discount of not more than ninety days, except as provided by Regulation C. accompanying Circular No. 4, Series of 1915. (c) It must have arisen out of actual commercial transactions; that is, be a bill which has been issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been or are to be used for such purposes. (d) It must not have been issued for carrying or trading in stocks, bonds, or other investment securities except bonds and notes of the Government of the United States; but the pledge of goods as security for a bill is not prohibited.

II. *Character of Paper Eligible*—The Federal Reserve Board, exercising its statutory right to define the character of a bill eligible for rediscount at a Federal Reserve Bank, has determined: (a) That it must be a bill the proceeds of which have been used or are to be used in producing, purchasing, carrying, or marketing goods in one or more of the steps of the process of production, manufacture, and distribution. (b) That no bill is "eligible," the proceeds of which have been used or are to be used: (1) For permanent or fixed investments of any kind, such as land, buildings, machinery (including therein additions, alterations, or other permanent improvements, except such as are properly to be regarded as costs of operation). It may be considered as sufficient evidence of compliance with this requirement if the borrower shows, by statement or otherwise, that he has a reasonable excess of quick assets over his current liabilities on open accounts, short-term notes, or otherwise; (2) for investments of a merely speculative character, whether made in goods or otherwise.

III. *Method of Certifying Eligibility*—Any member bank applying for rediscount of a bill after July 15, 1915, must certify in its letter of application, over the signature of a duly authorized officer, that to the best of its knowledge and belief the bill was issued for one of the purposes mentioned in the above paragraphs and conforms to Section 13 of the Federal Reserve Act and to this regulation.

It is recommended that every member bank maintain a file which shall

contain original signed statements of the financial condition of borrowers, or true copies thereof, certified by a member bank or by a notary public, designating where the original statement is on file. Statements should contain all the information essential to a clear and correct knowledge of the borrower's credit and of his method of borrowing. A schedule specifying certain information, which it is desirable that such statements should include, is hereto appended.

Member banks shall certify in their letters of application for rediscount whether the paper offered for rediscount is depositor's or purchased paper, or paper rediscounted for other member banks, and whether statements are on file. When it does not appear that such statements are on file, except as hereinafter provided under (1), (2) and (3) below, the Federal Reserve Bank shall satisfy itself as to the eligibility of the paper offered for rediscount, and member banks will be expected to use such statement forms, identifying stamps, etc., as may be prescribed by the respective Federal Reserve Banks.

Any member bank rediscounting with a Federal Reserve Bank paper acquired from another member bank, with the indorsement of such member bank, may accept such member's certification regarding the character of the paper and the existence of the necessary statements.

Statements of the borrower's financial condition may be waived where bills offered for rediscount have been discounted by member banks for any of their depositors in the following cases: (1) If the bill bears the signatures of the purchaser and the seller of the goods and presents prima facie evidence that it was issued for goods actually purchased or sold; or (2) if the aggregate amount of obligations of such depositor actually rediscounted and offered for rediscount does not exceed \$5,000, but in no event a sum in excess of ten per centum of the paid-in capital of the member bank; or (3) if the bill be specifically secured by approved warehouse receipts covering readily marketable staples; *Provided, however*, That the bank shall certify to these conditions on the application blank in a manner to be designated by the respective Federal Reserve Banks.

INFORMATION DESIRED IN CREDIT FILES OF MEMBER BANKS

The credit files of member banks, referred to in the above regulation, should include information concerning the following matters: (a) The nature of the business or occupation of the borrower; (b) if an individual, information as to his indebtedness and his financial responsibility; (c) if a firm or corporation, a balance sheet showing quick assets, slow assets, permanent or fixed assets, current liabilities and accounts, short-term loans, long-term loans, capital and surplus; (d) all contingent liabilities, such as indorsements, guaranties, etc.; (e) particulars respecting any mortgage debt and whether there is any lien on current assets; (f) such other information as may be necessary to determine whether the borrower is entitled to credit in the form of short-term loans.

CIRCULAR No. 8, SERIES 1915

WAIVER OF DEMAND, NOTICE AND PROTEST
January 27, 1915

Section 13 of the Federal Reserve Act provides in part: "Upon the indorsement of any of its member banks, with a waiver of demand, notice, and protest by such bank, any Federal Reserve Bank may discount notes, drafts, and bills of exchange arising out of actual commercial transactions."

Attention is called to the fact that the waiver of demand, notice, and protest by the bank procuring the discount does not release the holder of the note or bill discounted from the duty to protest such note or bill in order that those indorsers who have not executed such a waiver may be held liable.

If the holder should fail to protest an indorsed note or bill at maturity, the Federal Reserve Bank might, in such circumstances, hold the member bank liable on account of the waiver executed, but other indorsers would be legally released.

Federal Reserve Banks are, therefore, cautioned to take all necessary steps to insure the protest of all maturing notes and bills which are in their possession or have been sent for collection through any correspondent bank wherever such notes or bills contain any indorsements not accompanied by a waiver of demand, notice, and protest. To insure this the bank or agent presenting any note or bill, held by the Federal Reserve Bank, at the place of payment at maturity should be instructed, if the same is dishonored, to immediately protest such note or bill and to have all necessary notices sent to the indorsers.

BANKERS' ACCEPTANCES
February 8, 1915

"Acceptances" are dealt with in the Federal Reserve Act in two different sections—Sections 13 and 14. Section 13 deals with the "acceptance" as one of the forms of paper in the discount of which Federal Reserve Banks may engage, restricting the discount of acceptances to such as bear the indorsement of a member bank. Section 14 invests the Federal Reserve Banks, under regulations to be prepared by the Federal Reserve Board, with power to engage in open-market operations, of which the "banker's acceptance" is one of the most important.

Careful study has led the Federal Reserve Board to the conclusion that, at any rate in the first stages, so far as practicable, priority should be given to operations under Section 13. The acceptance is still in its infancy in the field of American banking. How rapid its development will be cannot be foretold; but the development itself is certain. Opportunity is given by the Federal Reserve Act to assist the movement in this new direction; the present regulations are to be regarded as a first step and will be extended as circumstances and a reasonable regard for the other uses and needs of the credit facilities of the Federal Reserve System may warrant.

It is believed that it would unduly restrict the development of the

acceptance business to keep it altogether confined within the provisions of Section 13, which require that acceptances, in order to be eligible for rediscount at a Federal Reserve Bank, must bear the indorsement of a member bank; particularly in view of the further fact that the law limits the amount of acceptances which may be taken with the indorsement of a member bank to fifty per centum of its paid-in capital and surplus. Having found it necessary to extend the scope of dealings in acceptances beyond these limits, the board has exercised the authority conferred upon it by Section 14, and has formulated regulations covering the purchase of acceptances without invariably requiring the indorsement of a member bank.

The acceptance is the standard form of paper in the world discount market, and both on this account and because of its acknowledged liquidity universally commands a preferential rate. By reason of its being readily marketable it is widely regarded as a most desirable paper in the secondary reserves of banks and will help to provide an effective substitute for the "call loan." Its growth, however, will depend upon the ability of the American market to adjust its rates effectively to those prevailing in other markets for paper of this class.

Recognizing these facts, the Federal Reserve Board has determined to allow the Federal Reserve Banks latitude in fixing rates for acceptances: Federal Reserve Banks may, from time to time, submit for the approval of the board maximum and minimum rates within which they desire to be authorized to deal in acceptances; within such limits, and subject to such modifications as may be imposed by the board, Federal Reserve Banks will be allowed to establish the rates at which they will deal in acceptances.

The board believes it to be in accordance with the spirit of the Act to accord preferential treatment to acceptances bearing the indorsement of member banks, offered for rediscount under Section 13—even to the point of allowing lower rates for such acceptances, inasmuch as, under the terms of this section, such acceptances are available as collateral against the issue of Federal Reserve Notes; and the board will sanction a slight preferential in favor of acceptances bearing the indorsement of member banks.

When acceptances bearing the indorsement of member banks are not obtainable in adequate amount or upon satisfactory terms, Federal Reserve Banks desiring to purchase acceptances should restrict themselves, as far as possible, to such acceptances as bear some other responsible signature (other than that of the drawer and the acceptor), and preferably that of a bank or banker.

REGULATION D, SERIES OF 1915

I. *Definition*—In this regulation the term "acceptance" is defined as a draft or bill of exchange drawn to order, having a definite maturity and payable in dollars, in the United States, the obligation to pay which has been *accepted* by an acknowledgment written or stamped and signed across the face of the instrument by the party on whom it is drawn; such agreement to be to the effect that the acceptor will pay at

maturity according to the tenor of such draft or bill without qualifying conditions.

II. *Statutory Requirements Under Sections 13 and 14*—Section 13 of the Federal Reserve Act provides that: (a) Any Federal Reserve Bank may discount acceptances: (1) Which are based on the importation or exportation of goods; (2) which have a maturity at time of discount of not more than three months; and (3) which are indorsed by at least one member bank. (b) The amount of acceptances so discounted shall at no time exceed one-half the paid-up capital stock and surplus of the bank for which the rediscounts are made. (c) The aggregate of notes and bills bearing the signature or indorsement of any one person, company, firm or corporation rediscounted for any one bank shall at no time exceed ten per centum of the unimpaired capital and surplus of said bank; but this restriction shall not apply to the discount of bills of exchange, drawn in good faith against actually existing values.

Section 14 of the Federal Reserve Act permits Federal Reserve Banks, under regulations to be prescribed by the Federal Reserve Board, to purchase and sell in the open market bankers' acceptances, with or without the indorsement of a member bank.

III. *"Eligibility"*—The Federal Reserve Board has determined that until further order, to be eligible for discount under Section 13, by Federal Reserve Banks, at the rates to be established for bankers' acceptances: (a) Acceptances must comply with the provisions of Paragraph II (a), (b), (c) hereof; (b) acceptances must have been made by a member bank, non-member bank, trust company, or by some private banking firm, person, company or corporation engaged in the business of accepting or discounting. Such acceptances will hereafter be referred to as "bankers'" acceptances;⁷ (c) a banker's acceptance must be drawn by a commercial, industrial, or agricultural concern (that is, some person, firm, company, or corporation) directly connected with the importation or exportation of the goods involved in the transaction in which the acceptance originated; (d) a banker's acceptance must bear on its face, or be accompanied by evidence in form satisfactory to a Federal Reserve Bank, that it originated in an actual bona fide sale or consignment involving the importation or exportation of goods. Such evidence may consist of a certificate on or accompanying the acceptance to the following effect:

This acceptance is based upon a transaction involving the
importation or exportation of goods. Reference No. _____.
Name of acceptor: _____;

(e) bankers' acceptances, other than those of member banks, shall be eligible only after the acceptors shall have agreed in writing to furnish to the Federal Reserve Banks of their respective districts, upon request, information concerning the nature of the transactions against which acceptances (certified or bearing evidence under III (d) hereof) have been made; (f) a bill of exchange accepted by a "banker" may be considered as drawn in good faith against "actually existing values," under

⁷Drafts and bills of exchange eligible for discount under section 13, other than "bankers'" acceptances, have been dealt with by Regulation B, series of 1915.

II (c) hereof, when it is secured by a lien on or by transfer of title to the goods to be transported; (g) except in so far as they may be secured by a lien on or by transfer of the title to the goods to be transported, the bills of any person, firm, company, or corporation, drawn on and accepted by any private banking firm, person, company, or corporation (other than a bank or trust company) engaged in the business of discounting or accepting, and discounted by a Federal Reserve Bank, shall at no time exceed in the aggregate a sum equal to five per centum of the paid-in capital of such Federal Reserve Bank; (h) the aggregate of acceptances of any private banking firm, person, company, or corporation (other than a bank or trust company) engaged in the business of discounting or accepting, discounted or purchased by a Federal Reserve Bank, shall at no time exceed a sum equal to twenty-five per centum of the paid-in capital of such Federal Reserve Bank.

To be eligible for purchase by Federal Reserve Banks under Section 14, bankers' acceptances must comply with all requirements and be subject to all limitations hereinbefore stated, except that they need not be indorsed by a member bank: *Provided, however,* That no Federal Reserve Bank shall purchase the acceptance of a "banker" other than a member bank which does not bear the indorsement of a member bank, unless it has first secured a satisfactory statement of the financial condition of the acceptor in form to be approved by the Federal Reserve Board.

IV. *Policy as to Purchases*—While it would appear impracticable to fix a maximum sum or percentage up to which Federal Reserve Banks may invest in bankers' acceptances, both under Section 13 and Section 14, it will be necessary to watch carefully the aggregate amount to be held from time to time. In framing their policy with respect to transactions in acceptances, Federal Reserve Banks will have to consider, not only the local demands to be expected from their own members, but also requirements to be met in other districts. The plan to be followed must in each case adapt itself to the constantly varying needs of the country.

NATIONAL BANKS AS EXECUTORS AND TRUSTEES February 15, 1915

The Federal Reserve Board is empowered by paragraph k of Section 11 of the Federal Reserve Act to grant by special permit to national banks the right to act as trustee, executor, administrator, or registrar of stocks and bonds where the exercise of such powers is not in contravention of State laws. In the exercise of such power, the board issues herewith Regulation H covering such special permits.

The board will from time to time modify and supplement its regulations on this subject as experience may dictate.

REGULATION H, SERIES OF 1915

I. *Statutory Provisions*—The Federal Reserve Act provides: "Sec. 11. The Federal Reserve Board shall be authorized and empowered: (k) To grant by special permit to national banks applying therefor,

when not in contravention of State or local law, the right to act as trustee, executor, administrator, or registrar of stocks and bonds, under such rules and regulations as the said board may prescribe."

II. *Applications*—1. A national bank desiring to exercise any or all of the privileges authorized by Section 11, sub-section (k), of the Federal Reserve Act, shall make application to the Federal Reserve Board on a form approved by said board (Form No. 61). Such application shall be forwarded by the applying bank to the chairman of the board of directors of the Federal Reserve Bank of its district, and shall thereupon be transmitted to the Federal Reserve Board with his recommendations. 2. There shall be attached to each application a statement of the character and extent of the privileges which the applying bank desires to exercise under the following headings: (a) Trustee of personal trusts; (b) trustee of corporate trusts; (c) administrator of personal estates; (d) executor of wills; (e) registrar of stocks; (f) registrar of bonds. 3. Each applicant shall, upon request, furnish copies of the laws of the State in which it is located bearing upon the exercise of such powers in force at the time application is made.

III. *Separate Departments*—Every national bank permitted to act under this section shall establish a separate trust department, and shall place such department under the management of an officer or officers, whose duties shall be prescribed by the board of directors of the bank.

IV. *Provision for Keeping Trust Funds*—The funds, securities, and investments held in each trust shall be held separate and distinct from the general funds and securities of the bank, and separate and distinct one from another. The ledgers and other books kept for the trust department shall be entirely separate and apart from the other books and records of the bank.

V. *Examinations*—Examiners appointed by the Comptroller of the Currency or designated by the Federal Reserve Board will hereafter be instructed to make thorough and complete audits of the cash, securities, accounts, and investments of the trust department of every bank at the same time that examination is made of the banking department.

VI. *Conformity with State Laws*—Nothing in these regulations shall be construed to give to a national bank doing business as trustee, executor, administrator, or registrar of stocks and bonds under Section 11 (k) of the Federal Reserve Act any rights or privileges in contravention of the laws of the State in which the bank is located.

VII. *Revocation of Permits*—The Federal Reserve Board reserves the right to revoke permits granted under these regulations in any case where in the opinion of the board a bank has willfully violated the provisions of these regulations or the laws of any State relating to the operations of such bank when acting as trustee, executor, administrator, or registrar of stocks and bonds.

VIII. *Changes in Rules*—These regulations are subject to change by the Federal Reserve Board; provided, however, that no such change shall prejudice obligations undertaken in good faith under regulations in effect at the time the obligation was assumed.

REGULATION I, SERIES OF 1915, SUPERSEDING REGULATION No. 9 OF
DECEMBER 31, 1914LOANS ON FARM LANDS
February 10, 1915

Section 24 of the Federal Reserve Act provides that: "Any national banking association not situated in a central reserve city may make loans secured by improved and unencumbered farm land, situated within its Federal Reserve District, but no such loan shall be made for a longer time than five years, nor for an amount exceeding fifty per centum of the actual value of the property offered as security. Any such bank may make such loans in an aggregate sum equal to twenty-five per centum of its capital and surplus, or to one-third of its time deposits, and such banks may continue hereafter as heretofore to receive time deposits and to pay interest on the same."

National banks not located in central reserve cities may, therefore, now legally make loans secured by mortgages on real estate within the following limitations: 1. The real estate security must be farm land. 2. It must be improved. 3. There must be no prior lien; in other words, the lending bank must hold an absolute first mortgage or deed of trust. 4. The property must be located in the same Federal Reserve District as the bank making the loan. 5. The amount of the loan must not exceed fifty per centum of the actual value of the property upon which it is secured. 6. The loan must be for a period not longer than five years. 7. The maximum amount of loans which a national bank may make on real estate under the terms of the act shall be limited to an amount not in excess of one-third of its time deposits at the time of the making of the loan, and not in excess of one-third of its average time deposits during the preceding calendar year; provided, however, that if one-third of such time deposits as of the date of making the loan, or one-third of the average time deposits for the preceding calendar year, shall have amounted to less than one-fourth of the capital and surplus of the bank as of the date indicated, in such event the bank shall have authority to make loans upon real estate under the terms of the act to the extent of one-fourth of the bank's capital and surplus as of the date of making the loan.

In order that real estate loans held by a bank may be readily classified, a statement signed by the officers making a loan and having knowledge of the facts upon which it is based must be attached to each note secured by a first mortgage on improved farm land, certifying in detail as of the date of the loan that all the requirements of law have been duly observed.

The board calls attention to the closing paragraph of Section 24 of the act which provides that: "The Federal Reserve Board shall have power from time to time to add to the list of cities in which national banks shall not be permitted to make loans secured upon real estate in the manner described in this section" and gives notice that the foregoing regulations are subject to the authority of the board to revise the list of cities in which national banks shall not be permitted to make real estate loans in the manner above provided.

January 15, 1915.

TIME DEPOSITS AND SAVINGS ACCOUNTS

The Federal Reserve Board deems it advisable to amplify its regulation relating to time deposits and savings accounts issued November 11, 1914, and to define under the following headings those deposits against which the Federal Reserve Act requires a reserve of only five per cent. to be maintained:

1. Time deposits, open accounts.
2. Savings accounts.
3. Certificates of deposit.

It was clearly not the intention of the act to permit a reduction of reserve to five per cent. upon deposits which may ordinarily be checked upon, but in respect to which a bank, by a blanket provision in its by-laws, may at any time require a withdrawal notice of not less than thirty days to be given. The reduction of the reserve to be carried against time deposits is intended to apply only to deposits under written agreement not to be withdrawn within thirty days from the date as of which the reserve calculation is made. Therefore, on the date of calculating reserve, under the definitions contained in the accompanying regulation, no deposit may be deemed a *time deposit*, whether an *open account* or on *certificate*—

(a) If it is payable within thirty days, because of the approaching end of the specified period for which it was deposited or because of receipt of notice of the date on which withdrawal will be made;

(b) If it may be withdrawn by check within thirty days, although the bank may have the right, by written contract or otherwise, to require a withdrawal notice of not less than thirty days.

Nor may any certificate of deposit be considered a time certificate if any part of the amount represented by it is subject to check or may be withdrawn without the presentation of the certificate for proper indorsement.

While savings accounts may at any time, by the action of the bank, be converted into time deposits, they are, nevertheless, ordinarily withdrawable on demand. In the absence of any statutory limitation upon the sum which may be received by a bank from any one individual as a savings account, the board has no authority, for the purpose of calculating reserves, to impose any such limitation, but it feels strongly that in the interest of both the member banks and the Federal Reserve System, the broad provisions of the act in respect to time deposits, savings accounts and certificates of deposit, should not be made the means of any large general reduction of reserves by a transfer to those *forms* of deposits which are in *substance* demand deposits; and it is the purpose of the board to countenance or permit a reduction of reserves to five per cent. *only* on deposits which are, in fact as well as in form, entitled to such reduction within the spirit of the act.

Banks carrying savings accounts must record them in separate ledgers which do not contain ordinary checking accounts or other items. Open time accounts and time certificates of deposit should also be carried in

separate ledgers, but if carried in the same ledger with current checking accounts they must be grouped together so as to be readily distinguished from the latter.

The board desires to make it clear that the act requires the full reserve, at the rate prescribed for demand deposits, to be carried against all savings accounts and all time deposits whether on open account or certificate, which are subject to check or which the bank has been notified are to be withdrawn within thirty days.

REGULATION E, SERIES OF 1915, SUPERSEDING REGULATION NO. 7 OF 1914

January 15, 1915

TIME DEPOSITS AND SAVINGS ACCOUNTS

Section 19 of the Federal Reserve Act provides, in part, as follows:

"Demand deposits, within the meaning of this act, shall comprise all deposits payable within thirty days, and time deposits shall comprise all deposits payable after thirty days, and all savings accounts and certificates of deposit which are subject to not less than thirty days' notice before payment."

TIME DEPOSITS, OPEN ACCOUNTS

The term "time deposits, open accounts" shall be held to include all accounts, not evidenced by certificates of deposit or savings pass-books, in respect to which a written contract is entered into with the depositor at the time the deposit is made that neither the whole nor any part of such deposit may be withdrawn by check or otherwise except on a given date or on written notice given by the depositor a certain specified number of days in advance, in no case less than thirty days.

SAVINGS ACCOUNTS

The term "savings accounts" shall be held to include those accounts of the bank in respect to which, by its printed regulations, *accepted by the depositor at the time the account is opened*—

(a) The pass-book, certificate, or other similar form of receipt must be presented to the bank whenever a deposit or withdrawal is made, and

(b) The depositor may at any time be required by the bank to give notice of an intended withdrawal not less than thirty days before a withdrawal is made.

TIME CERTIFICATES OF DEPOSIT

A "time certificate of deposit" is defined as an instrument evidencing the deposit with a bank, either with or without interest, of a certain sum specified on the face of the certificate, payable in whole or in part to the depositor or on his order—

(a) On a certain date, specified on the certificate, not less than thirty days after the date of the deposit, or

(b) After the lapse of a certain specified time subsequent to the date of the certificate, in no case less than thirty days, or

(c) Upon written notice given a certain specified number of days, not less than thirty days before the date of repayment, and

(d) In all cases only upon presentation of the certificate at each withdrawal for proper indorsement or surrender.

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